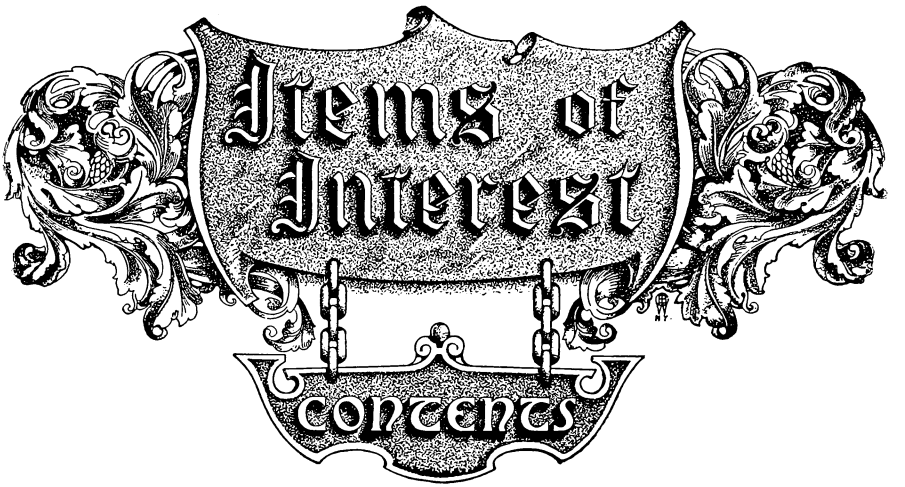


Exclusive Contributions

The Principles and Practice of Filling Teeth With Porcelain.
DR. JOHN Q. BYRAM 81

Prosthodontia

A Plea for More Scientific Forms of Artificial Teeth 94
Additional Letters 99

Orthodontia

Discussion of President's Address 103

Society Papers

Syphilis of the Mouth.
H. J. WALLHAUSER, M.D. 116

Society Discussions

Central Dental Association of Northern New Jersey—Discussion of Dr. Power's Paper 125
Central Dental Association—Discussion of Dr. Wallhauser's Paper 133
New Jersey State Dental Society 137

CONTENTS—Continued

Editorial

The Present Status of Army and Navy Dental Legislation 148

In Memoriam

Dr. W. D. Miller 152
Henry C. Boenning, M.D. 153
Dr. Joseph Fournier 154

Correspondence

Scientific Forms of Artificial Teeth 155

Society Announcements

National Society Meetings 156
Society Meetings 156
Connecticut State Dental Association 156
New Dental Society 157
Clinic of the G. V. Black Dental Club of St. Paul, Minn. 157
Programme of the G. V. Black Dental Club 158
New Jersey State Board of Registration and Examination in Dentistry 150
Southwestern Michigan Dental Society 159
Odontotechnique Society of New Jersey 159
Bayonne Dental Society 160
St. Louis Society of Dental Science 169

Subscription, $1.00 per year, in advance, to United States, Canada, Mexico, Cuba, Panama and other American territorial possessions. Other countries, $1.75. Single copies of this issue. 15 cents (Domestic).

Subscriptions received at any time, to date from January or July. Advertising rates made known on application. Remittances preferred by registered letter, postal money-order, or bank draft.

Notification of change in address should be made on or before the 10th of the month, in order to have change made in time for the following month's issue.

Address all communications to Consolidated Dental Mfg. Co., Publishers, Nos. 130, 132, 134 Washington Place; 187, 189, 191 West Fourth St., New York.



The Principles and Practice of Filling Teeth with Porcelain.*

By Dr. John Q. Byram, Indianapolis, Ind.

The Selection and Application of Porcelain.

A study of the colors of the teeth should be made before the porcelain for an inlay is selected. While the color of a tooth is due mainly to its pigments, the thickness of the dentin and enamel and the density of these tissues, with their power to absorb, transmit, refract, and reflect light, are also factors. The colors of most teeth containing no foreign pigments are hues of yellow, blue, brown, and gray, with a yellowish or bluish hue.

The first point to consider in the selections of colors is the variations of hues seen in different sections of the natural tooth. Under normal conditions dentin, which forms the body of the tooth, is some hue of yellow. The color of the enamel varies, and the variation of the thickness of the layer of the enamel, in different sections of the tooth, gives it a variety of hues of colors. A careful study of the colors of a tooth shows that the gingival third is usually some hue of yellow, modified by a hue of brown or gray, that the middle third generally appears to be a gray, having a yellowish or a greenish hue, and that the incisal third usually has a predominance of blue or gray.

*Copyright 1907, by Consolidated Dental Manufacturing Co.

In selecting the colors for an inlay, note the variation of color in the natural tooth, in which three or more colors, or hues of colors, are usually found. If the tooth is a vital one, the foundation, which should be constructed of a coarsely ground porcelain and be fired only to a high biscuit, should be a hue of yellow. Dentin is but slightly translucent and transmits light feebly; it should be replaced with a porcelain which approximates it in density, and which presents an unglazed surface. Such porcelain will cause the diffusion of the transmitted light, and this will cause less light to be transmitted to the cement and less reflected light to be transmitted through the porcelain. The enamels, or colors, which replace the enamel, should approach the colors of the tooth in their respective locations. The intensity of their pigments and the thickness of the layer of the enamel govern their intensity of color, and, in most cases, quite intense colors should be used. The enamels should be more fusible than the foundation and should be a porcelain of a finer grain.

Methods of Applying Porcelain.

There is a difference of opinion regarding the application of porcelain for inlays, and this has given rise to different methods of applying the porcelain in the construction. There are those who apply the enamel in layers; others who advocate building in sections; some who prefer to mix the colors; while there are still others who prefer to construct the inlay by using a mono-chromatic porcelain of a lighter hue than the tooth, and to color the cement with pigments to approximate the color of the tooth. The method of using porcelains of a lighter hue seems to have no advantage, except for labial cavities, and it is open to unfavorable criticism. It may be advantageously applied, however, in labial cavities where the angle of incidence is always such that some rays are feebly reflected and others partially absorbed by the cement. It seems hardly possible to construct inlays for inciso-approximal cavities, requiring two or more colors, by lightening the porcelain and coloring the cement to match the colors of the different sections of the tooth. Large inlays constructed in this way have a uniformity of color, which is objectionable.

Building in Layers.

The method of building inlays in layers is probably the most popular one. Enough foundation body to replace approximately the dentin and the lingual plate of the enamel should be applied and fired to a high biscuit. It should be built solidly into the matrix and contoured, allowing for shrinkage. If it is not the desired contour after it has been biscuited, more of the foundation body may be added and the firing repeated. The enamels are now

applied and the shading is varied from the gingival margin to the incisal edge. In the application of the enamels care should be taken to prevent porcelains of different colors from mixing when applying them in their respective position. The colors should be applied separately and biscuited, then a uniform color should be applied over the entire mass and fused. If the colors are applied intensely enough to reflect through the uniform color, there will be a harmonizing effect that more nearly approaches the natural tooth structure in appearance, while each particular color preserves its identity. This method obviates the necessity for using porcelain of a lighter hue and adding pigments to the cement. It also breaks up the uniformity of color so often noticeable when an inlay is constructed of a mono-chromatic porcelain.

Building in Sections. Another method is to build inlays in sections. The foundation is applied and fired to a high biscuit. The gingival third is covered with an enamel that has the same hue as the tooth in that location. In case this section of the tooth shows a hue of gray or brown, a thin layer of enamel of the required hue is applied and fired to a high biscuit before the enamel of the predominating hue is applied. The middle third is then covered with the enamel of the desired hue and hard biscuited. The incisal third is built with an enamel that approaches the hue of the incisal third of the natural tooth and fired to a hard biscuit, after which a uniform layer of a neutral color is applied and fused.

Mixing Colors. There are conditions, however, under which it is deemed advisable to mix colors in the construction of inlays. While this is not necessary in the greater number of cases, the author has found that the mixing of colors sometimes yielded better results than he could secure by other methods of application. Some colors may require modification. The yellows, for example, may need to be toned with the grays; the grays brightened by the addition of yellow; or the blues may be lightened by the admixture of green, or saddened by the addition of a gray.

In mixing two porcelains or in applying them in layers, it must be borne in mind that the resulting color is primarily due to the power of the combined porcelains to absorb or transmit light. When the two porcelains are mixed, or when they are applied in thin layers, the resultant color is that which is transmitted by both colors in common. When two colors, as blue and yellow, are combined, it is found that green is the only color that is common to both of them, and this is, therefore, freely transmitted or reflected; the others being absorbed. If a layer of blue is placed over a layer of yellow, the light, in passing through the blue porcelain, loses its red, orange, and yellow rays, which are absorbed, and are

not, therefore, transmitted; while green, blue and violet are transmitted to the yellow, which absorbs the blue and the violet, leaving the green to be transmitted or reflected. The purity of the green is dependent upon the purity of the yellow and the blue, and by the thickness of the layers. When blue is used to build the incisal portion of an inlay, the yellow foundation should extend only to the point at which the blue is to begin; for the blue will have a greenish hue, if it is applied over the yellow. When yellows and blues are applied over grays or browns, the underlying colors have the quality of saddening the overlying ones, because the transmitted rays from the yellow and blue are largely absorbed by the gray or brown.

It has been found that the method of constructing inlays of two bodies differing in density and fusibility yields the best results. The



FIG. 97.

foundation should not only be a higher fusing porcelain, but it should be a coarser one than the enamels. The coarse foundation should be fired to a high biscuit and fused and then after the enamels have been added in their respective locations and fused the two porcelains give a more natural combination of color than can be produced by a single body. A glaze may be applied for the final layer, when the inlays are constructed for those teeth whose enamel presents a highly translucent and glazed appearance.

In applying the enamels over the foundation, each layer should be fired only to a hard or high biscuit, heating the porcelain just to the point of glazing at the final fusing. This is to be borne in mind because, in the process of applying the porcelain in layers and fusing each layer, the underlying layers will be slightly over-fused and somewhat lighter in color.

Technique of Applying the Porcelain to the Matrix.

The application of the porcelain to the matrix requires an instrument for mixing, applying, and carving (Fig. 97) and three sable brushes (Fig. 98). Enough of the bristles of the smallest brush should be cut away to make it very flexible (Fig. 98a). While there are a number of special carvers on the market, and many of them good, the author has

found an instrument of the design shown in Fig. 97 to be the most useful. The blade serves as a spatula, the point of the carver may be used for applying the porcelain, and the instrument also meets the requirements for carving. The shank contains a series of circular grooves, which are useful in vibrating the matrix (Fig. 99).

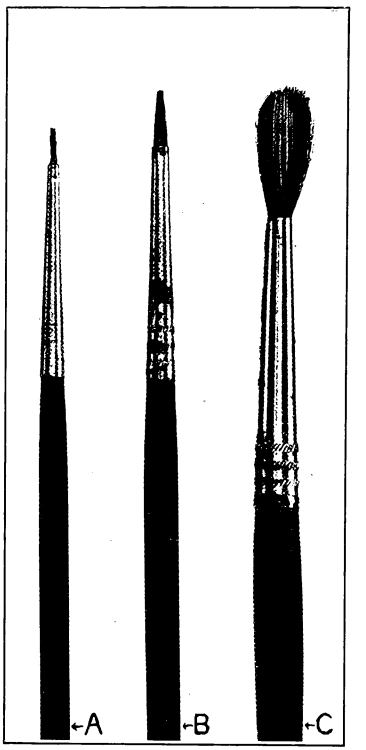


FIG. 98.

It is not necessary to invest a matrix which is constructed of a material 1/1000 or 1/2000 of an inch in thickness. It should be held with a pair of lock tweezers during the process of applying and carving the porcelain (Fig. 100). The tweezers should grip the matrix at the point where it will offer the greatest resistance. It has been found that this point is at or near the linguo-gingival angle of a matrix for a single approximal or an inciso-approximal cavity. Care should be exercised, however, to hold the matrix in such manner as to prevent its distortion while

applying and carving the porcelain (Figs. 101 and 102). Although the matrix has a limited degree of rigidity, it can not be handled roughly without changing its form.

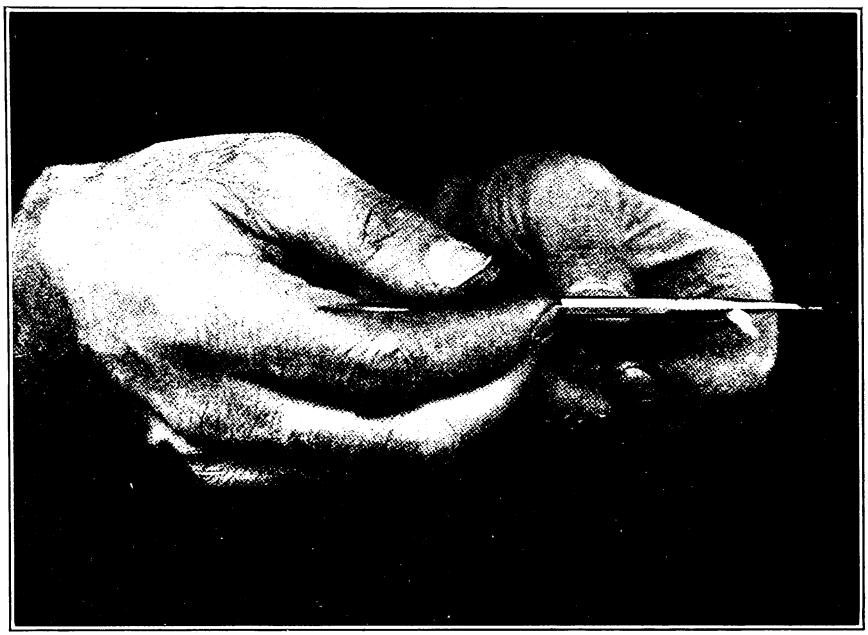


FIG. 99.

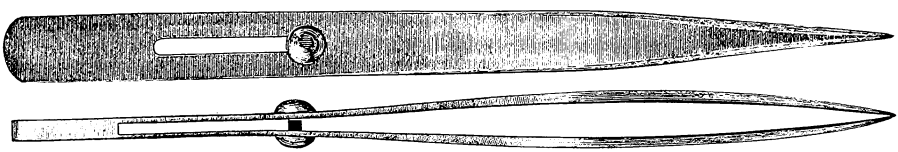
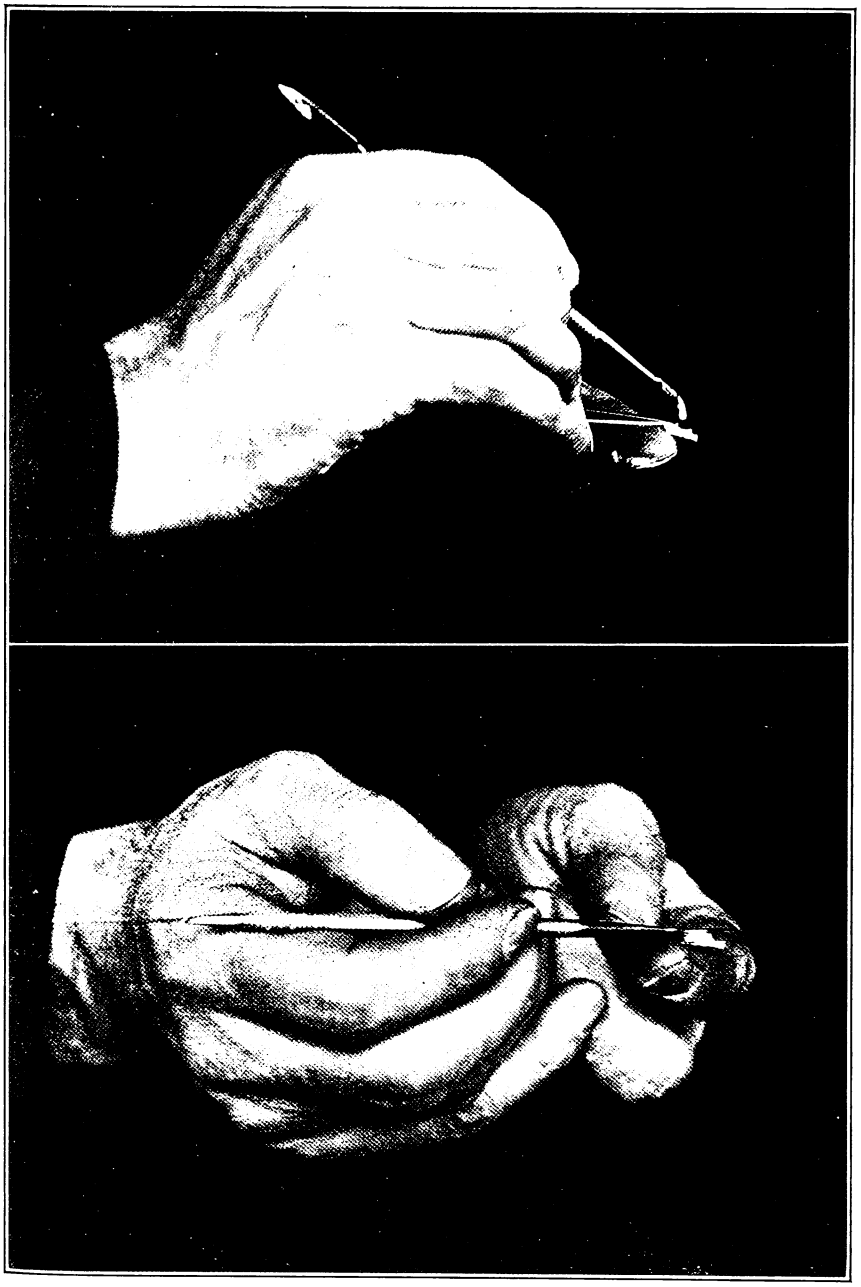


FIG. 100.

In case thin, pure gold is used for a matrix it is necessary to invest it (Fig. 64), to prevent its distortion during the process of applying the porcelain and to prevent its warping during the fusing. The investing cup should be made of some metal that does not readily oxidize, and that does not fuse at ordinary temperatures. The cup should be filled with powdered asbestos, which has been made plastic with water or alcohol. Apply a small quantity of the paste around the matrix and force it gently



FIGS. 101 and 102.

into the cup. Care must be exercised in investing the matrix that its side next to the asbestos may be supported at all points by the paste. This may be easily accomplished by lightly tapping the cup on the table. The

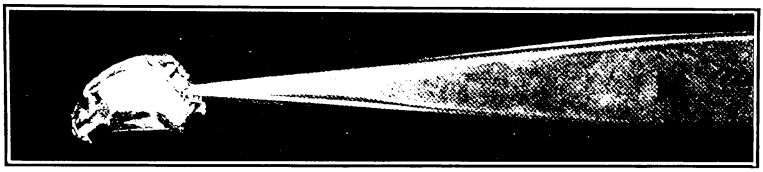


FIG. 103.



FIG. 104.



FIG. 106.



FIG. 105.

operator should be careful, however, to prevent the asbestos from coming in contact with the margins of the matrix. After properly investing the matrix the investment is to be dried slowly until all steam has escaped, or until all alcohol has burned away. If the matrix is filled with wax

before removing it from the cavity, and this is left in the matrix until the investing is finished, none of the paste could flow through any holes in the matrix. But in case there is no wax in it during the process of invest-

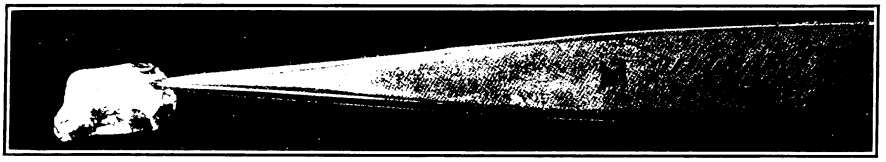


FIG. 107.



FIG. 108.



FIG. 110.

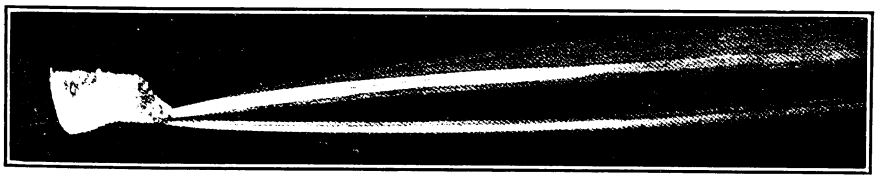


FIG. 109.

ing, and some of the paste flows through the holes into the matrix, it can be removed with a brush moistened in alcohol. Any wax left in the matrix should be burned out at this stage of the operation.

The author finds that he can obtain more satisfactory results, when

using either high or low fusing porcelain, by building inlays in sections, and the method used by him for constructing approximo-incisal inlays is as follows: The foundation is properly applied to represent the contour of the lost dentin (Fig. 103). If the porcelains are mixed with water they should be worked into a stiffer paste than when mixed with alcohol. This paste should be applied from the point of the carver (Fig. 101), and flowed to place by drawing the shank of the carver across the tweezers (Fig. 99). Care should be exercised to prevent the porcelain from flowing to points other than where it is intended to have it flow. This is done by absorbing the moisture with small strips of blotting paper or dry powder of the proper color. A surplus of paste should be placed

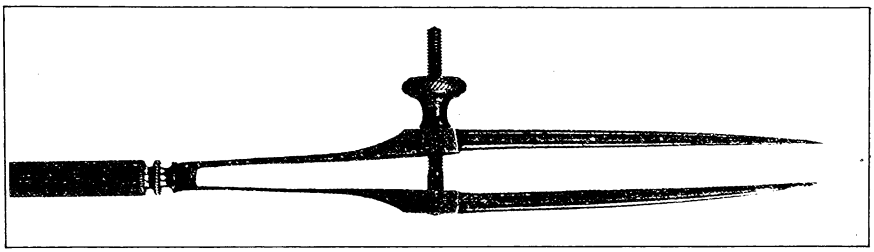
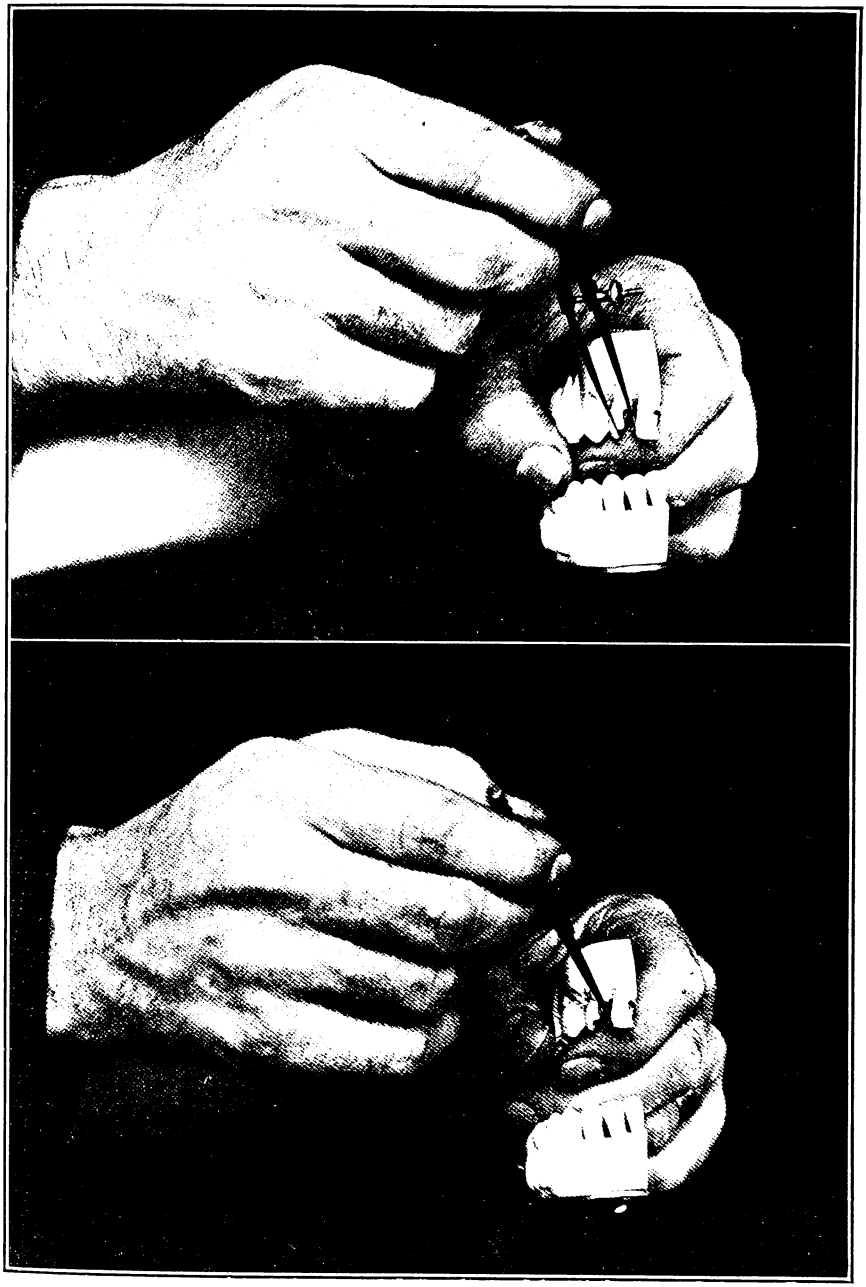


FIG. 111.

in the matrix, after which the moisture should be absorbed by dipping the paste into the dry porcelain from the same bottle. It is then brushed with a large brush (Fig. 98c), and carved to proper contour (Fig. 103). If, after biscuiting, it is found that a sufficient quantity of foundation has not been added, another layer should be applied and fired to a high biscuit and it should then appear as in Fig. 104.

An enamel having the same hue of a color as the gingival third of the tooth is now applied to that portion of the inlay. It should be built almost flush with the margins of the matrix, but under no condition should it be made fuller; and no porcelain should be permitted to remain on the surface of the matrix. This result can be obtained by carefully brushing over the surface of the matrix toward the porcelain. After the gingival section has been applied (Fig. 105) and biscuited (Fig. 106), the middle section is built almost flush with the margin using the enamel having the desired color (Fig. 107) and biscuited (Fig. 108). The incisal third is now built to proper contour with an enamel that approaches the color of this section of the tooth (Fig. 109). After this has been biscuited, the inlay should appear as in Fig. 110.



FIGS. 112 and 113.

At this stage of the operation the inlay may be tried into the cavity to ascertain whether it has the proper contour. It has been found that the contour of an inlay may be obtained by the following system of measurements: A delicate pair of calipers (Fig. 111) is used to obtain the distance from the axial wall of the cavity at the incisal edge to the approximating tooth (Fig. 112). After recording this measurement, the distance from the approximo-labio-gingival margin of the cavity to the approximo-incisal angle of the approximating tooth is measured and recorded (Fig. 113). While these measurements will assist the



FIG. 114.



FIG. 115.

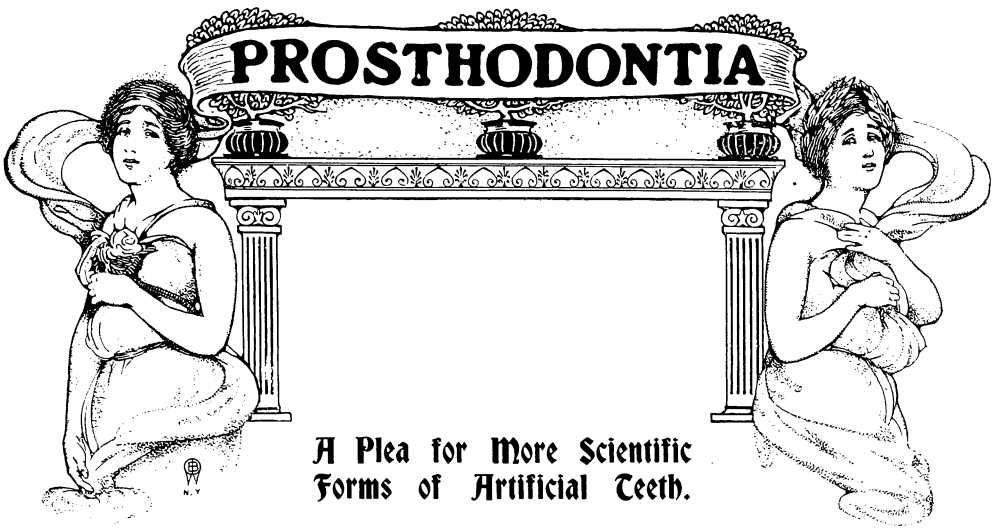
operator to obtain proper contour without trying the inlay into the cavity, a more accurate and better contour may be obtained by trying matrices for large inciso-approximal inlays into the cavities after the sections of enamels have been applied.

The entire mass is now covered and built flush with the margins of the matrix with a uniform layer of a neutral color and fused (Fig. 114), after which a layer of a glaze or a second layer of the neutral color of enamel is applied in such a manner that the porcelain does not overlap the margins and then fused (Fig. 115). If the details of this method of applying the porcelain are observed, the finished inlay will be flush with the margins of the cavity, thus preventing an overlapping of the porcelains.

It is probable that any porcelain that is to be applied to an invested matrix should be mixed with alcohol. It should be mixed to a cream-like consistency and flowed into position with the point of the carver or a

small brush; it is not to be carved as the porcelain that is mixed with water. After moistening the matrix with alcohol, fill it almost to the margin with the paste that is to form the foundation of the inlay. The alcohol is then evaporated and the porcelain is fired to a high biscuit. After this firing the investment should be chilled by dipping the base of the cup in water, using care to prevent the investment from becoming moist. In case more foundation is required, a second application is made and biscuited. The enamels, approximating the colors of the various sections of the tooth, are now selected and applied according to the method just described. It is better to apply them separately and fire them to a high biscuit, after which a uniform layer is spread over the entire mass and fused.

If the cavity on the labial or buccal surface extends beyond the neck of the tooth, and the gum has receded (Fig. 7), that portion of the inlay replacing the cementum can be constructed of pink porcelain to imitate the gum. The foundation should be applied as for other cavities on these surfaces. Select and apply an enamel in the gingival third that approaches the hue of the enamel. Then apply a gum enamel body to replace the cementum. It should be contoured to represent the festoon of the gum and then fused. This causes the inlay to be more deceptive than one constructed entirely of yellow porcelain.



A Plea for More Scientific Forms of Artificial Teeth.

Editor ITEMS OF INTEREST.

Dear Sir—I herewith forward to you three letters for publication, in response to my appeal in the November issue of your magazine, from three of the foremost men in the world in the specialty of dental prosthesis. There are three or four points in these letters to which I should particularly like to call attention.

In the first place, all three of these writers agree that the artificial teeth supplied at the present time by the manufacturers are thoroughly bad, both from the standpoint of beauty and usefulness. Secondly, that they necessitate much time and labor on the part of the dentist in fitting and grinding which would not be necessary if the teeth were properly made; and thirdly, that the manufacturers seem content to supply what those in our profession (or out of it) with the lowest standard are satisfied with. In other words the needs and demands of the best men, the men who have ideals and who are striving for a higher standard in dentistry, both for the benefit of the profession and the public, are to be ignored because the men who do the cheapest work, who have no ideals and whose work constantly tends to degrade dentistry, are satisfied with artificial teeth as now made. What does the profession as a whole think of this? That is the question which, at the moment, I am most interested to have answered, and again I ask all who are willing to co-operate with or encourage those who are undertaking to bring about this reform to write direct to me to my address as given below.

I cannot refrain from calling attention to one more point in these letters which calls up a humorous, or a sarcastic state of mind according to the feeling of the moment. Several manufacturers supply a *few* sets of teeth which they advertise as "natural" patterns or molds. What, then, are all of the others?

J. LEON WILLIAMS,
30 George Street, Hanover Square, W., London, England.

Editor ITEMS OF INTEREST.

Dear Sir—I wish to support the action of Dr. Spence and Dr. J. Leon Williams, and many others all over the world, in bringing before members of our profession the loss of time inflicted upon us by the extraordinary lack of scientific knowledge shown in the manufacture of artificial teeth. I suppose it has never occurred to the manufacturers how much unnecessary drudgery they give us, by supplying with such bewildering liberality anything we do *not* want, resulting in scientific prosthesis being almost a negligible quantity, and patients often being disfigured, and permanently discomforted, when wearing dentures.

I have often wondered why the manufacturers only cater to the needs of one dental world, namely the wholesale dental tradesman, who produces cheap, bad dentures by the gross, without any comfort or satisfaction to the unfortunate patients who have to wear them, instead of to the needs of those artistic and scientific dentists, who want to make life-like restorations of lost organs.

From what I have learned in talking over this problem for years with our ablest and most thoughtful men, the better men are prepared to pay for a more natural, and more excellent tooth—which, although it may not be produced by the million, will really do better service in prosthetic dentistry, and give the manufacturer a better profit.

I began my dentistry when bone work was largely practiced with gold plate work. Hours were spent in preparing the natural teeth for this work, but the result was a work of art. This style of work died hard when vulcanite first began to be used, about 1856-7. The practice then was to "let down" the indurated vulcanite plates for a more accurate fit on the model by means of the carving tools, as was the routine with ivory or bone work. In doing this ivory work the more intelligent and artistic dentist made use of skulls, containing good sets of teeth, for study, and it was this study that taught my father to use the compensating curve in his dentures as a regular routine, much to the advantage and comfort of his patients. This compensating curve is one of those simple yet in-

dispensable conditions of the setting of our teeth that is not taken seriously by many manufacturers. Those who have considered and acted on it to a certain extent are told and discouraged by ignorant dentists that they do not like such teeth, as they require so much "grinding." The fact is that these improved teeth from the anatomical standpoint require very little grinding, provided the dentist has the knowledge with which to set up edentulous cases. I have had a set of artificial teeth brought into anatomical relations with little or no grinding.

Were the real value of occlusion appreciated, the baneful "flat bite," which ninety-nine out of one hundred patients have to endure, would disappear, because the dentist and his assistant would know that the occlusion is not the radius of a circle, but a different movement more approaching parallel action than most of us are able to grasp.

The chief defects of these improved teeth, to my mind, are the insufficient modelling of the molar teeth and their lack of interdigitation with the cusps of the opposing teeth. Then the enamel surfaces are in excess, the normal necks of the teeth being flattened out of due proportion, especially in the incisors and canines. If one wishes to make life-like dentures, especially in the lower teeth, one must spend much time in grinding on these palisades of porcelain a more or less natural neck, and making visible the roots of the teeth, which Nature herself does very commonly in the case of elderly people. Incisors treated in this way do not disfigure the features of a patient, as the teeth do not resemble piano keys or garden palings by the uniform parallelism; on the contrary, each incisor can be made to express that individuality of feature which one sees in nature.

I hardly know teeth of any manufacture where the real shape of natural teeth is attempted, for all the labial enamel surfaces are unreasonably flattened and prolonged. I mounted in my youth many natural teeth, and I do not remember to have had any difficulty in bringing the natural tooth into harmonious relations with its fellows, although the teeth had constricted natural necks and often part of the root was visible.

The proposal to select *ten* types of natural teeth, and mold each type in different yet graduated sizes, is absolutely practical, as it would give us greater resources, by differentiating teeth in form and color. In other words, teeth designed on this simpler and more rational plan would enable us to do more life-like work, and to give our patients stronger porcelain teeth, as in all probability, were the matter comprehensively studied, the platinum pin as an anchorage would tend to disappear. The opportunity would be afforded, by means of this interchangeable method, to use larger or smaller laterals or central incisors as well as more life-like canines, for the color question could be managed with some artistic

sense, instead of the unintelligent uniformity and conventionality which so often now disfigure the mouths of beautiful women.

Years ago a Liverpool dentist named Massey manufactured teeth which were a pleasure to look at, not only for their form, but also for their color, which was remarkably natural. Massey's teeth are missed by many of us, and few porcelain teeth have taken their place for strength, as well as the other qualities I have mentioned.

There is the greatest need for an international understanding on porcelain tooth occlusion—for a selection of suitable types limited in number but graduated in size, and of "shades" that do fall in with average wants. I have many times in the past asked manufacturers to supply me, at a largely enhanced price, with teeth of forms and colors I supplied models of, and oil and water-color sketches of the tones or shades wanted for particular cases. Thanks to inlay work, we can do this special shading now for ourselves, but it could have been done years ago if manufacturers had been disposed to help us, instead of hindering us with teeth of a monotony and conventionality as senseless as it is time-wasting and cramping.

As Dr. Williams very truly says, we, as a profession, are *not* consulted, else the dreadful caricatures of teeth that burden the drawers of the depots, and the mouths of our patients, would never exist. Manufacturers copy one another instead of studying nature through the eyes of observant dentists.

I trust many men will respond to Dr. Williams's appeal for us to be articulate with regard to our needs, and I for one will be very glad to co-operate in the useful work he suggests.

W. Booth Pearsall, F.R.C.S.I.,

Merion, 97 Finchley Road, London, England.

Editor Items of Interest.

Dear Sir—I should like to thoroughly indorse the article appearing in Items of Interest for November by Dr. J. Leon Williams on the need of more natural forms for artificial teeth.

This is a subject on which I feel very strongly. For some years I have tried to get the manufacturers here interested in this question, but without the slightest result, their remarks being to the effect that they can sell as many teeth of the present forms and types as they can make. So far as I know most of the leading manufacturers make a few sets of

what they call "natural" patterns, the remainder being more or less of the piano key type. In American teeth, especially, the molars and bicuspids are too narrow and the articulating surfaces bad, requiring much grinding to get anything approaching a satisfactory occlusion. In English teeth, in the use of which I think I can safely lay claim to a very large and extended experience, the same thing is true—much grinding and arranging being necessary in order to get anything approaching satisfactory results. Even the few so-called "natural" forms do not approach the ideal tooth at all. I do not think it would require any more skill or outlay to produce a really good tooth (except the first cost of molds) than is required to make the present imperfect forms. But, if the expense is greater, let the manufacturer charge an increased price and those who want the best will certainly be glad to have and to pay for them.

I trust that this article of Dr. Williams will open up an extended correspondence on this question and that the matter will not be allowed to drop until we get some recognition of our needs from the manufacturers.

Yours truly,

(Signed) W. E. FLETCHER,

10 Lower James Street, Golden Square, London, England.

Dr. J. LEON WILLIAMS,

London, England.

Dear Doctor—I have just read with much interest your letter in the November number of ITEMS OF INTEREST. It is a subject to which I have called the attention of dentists and teeth manufacturers for years, but without avail. It is surprising how few dentists pay any attention to the serious defects in all makes of teeth. The one thing that has troubled me most is the construction of bicuspids and molars. Almost universally the cusps of the upper teeth are made of equal length instead of the lingual being shorter as in nature. This necessitates much grinding in order to bring the buccal cusps into proper alignment with the fronts. Then what occurs? The pins, even in long teeth, are placed so near the cusps that the porcelain has to be all, or nearly all, ground to the pins.

For many years I have endeavored to induce the White Co. and Justi to correct this, but without result, except that although Justi has made some change, he still makes his bicuspids so narrow that I have no use for them. You have also referred to another serious fault, which is that many of the teeth are so thin or narrow that there is little masticating surface.

A few years ago I made some suggestions to the Twentieth Century Co., and as a result they have made some molds I wish you would examine, especially Nos. 48, 56, 86, 87, 90, 92, and pass your judgment on them. They have given me much satisfaction. I can use the bicuspids and molars with all fronts, wide and narrow, long and short, as there is so much less difference in nature in the bicuspids and molars.

You are quite correct as to the unnecessary number of molds. For instance, White's catalogue shows more than 100 molds of *upper bicuspids* and *molars* for *rubber* work, and there are very few of them that I would ever have any use for.

Having used the Twentieth Century teeth for several years I can find no fault with them. There are some fine fronts, as for instance, Mold 76, using 87 bicuspids and molars, and they have some good shades.

Thanking you for your excellent paper,

Very truly yours,

(Signed) L. P. HASKELL,

One of the last of the "Old Guard."

Venetian Building, 34 Washington Street, Chicago.

Additional Letters.

Editor ITEMS OF INTEREST.

Dear Sir—In reference to the editorial in the January ITEMS OF INTEREST I may say that to any one who appreciates the principles underlying orthodontia, whether he practices the art or not, it must be evident that the shapes of the artificial teeth which are in general use are wholly inadequate to restore practical conditions in the mouth, to say nothing of approaching an ideal.

How to change this state of affairs, however, is not a simple problem by any means. It is one that will require much thought, study and consideration by all interests concerned.

Manufacturers and commercial men generally aim to foresee and supply a demand; but in a case like this, where thousands of dollars would be involved in making even slight changes in the molds, they would seem justified in waiting to be shown that the cry for a change is to be a real demand and not a whim.

The first questions involved are ones that will have to be settled by the profession at large. These are—just what changes are needed, who will model them, will they be practical, and will they be generally

adopted when made? When these problems can be solved and answered satisfactorily, then manufacturers will be found who will enter the field and supply that demand.

Some years ago, in company with others interested in this same subject, I visited one of the large manufacturers in Philadelphia and went over the subject with him. While looking over samples from various molds and discussing them, we came upon one mold that more nearly approximated natural conditions than any we had seen; we were informed that this mold had been made with the idea of partially meeting the demand for improved shapes of artificial teeth, but that it had been discontinued, as they had found it to be unsalable. Experiments like this are apt to discourage the man whose capital is involved.

What is to be done about it? That will depend entirely on the attitude of the profession.

The hardest thing to overcome is inertia, but if it is possible to arouse the men and start a discussion that will remain abstract and practical rather than personal, then some good may come of it, otherwise——

Yours respecfully,

FREDERICK CROSBY BRUSH, D.D.S.

New York, N. Y., January 11th.

Editor ITEMS OF INTEREST.

Dear Sir—I have been interested in both Dr. Williams's article in the November number and your editorial in the January number of the ITEMS.

It seems to me that there is a radical change needed in the forms of artificial teeth, especially in bicuspids and molars. The occluding surfaces should be larger with deeper cusps, and it would be of the greatest utility to have the buccal surfaces slope, as Dr. Williams suggests, to accommodate the narrowing of the maxilla. Should they be desired, I will be glad to send models of several sets of natural teeth.

Very truly yours,

ALBERT I. MACKINTOSH.

Hyde Park, Mass.

Editor ITEMS OF INTEREST.

Dear Sir—I have just been reading your editorial on lack of interest shown by the profession in Dr. Williams's communication in your Novem-

ber number. This of course induced me to turn back to the November number and carefully read the article again. I question very much the fact that more than fifty per cent. of the three thousand dentists in this country have ever given the subject a moment's consideration; they have taken what has been offered and converted them into "coin of the realm" in the quickest possible way. Size and color are the only important things to be considered, unless it be the price. But it does seem as though out of the other fifty per cent. at least a thousand or two of dentists would certainly recognize the undeniable truth of some of the statements as set forth by Dr. Williams and be sufficiently interested to help along a movement for reform. The only way it can ever be brought about is by a general complaint from a large body of dentists. Dr. Bonwill during all his life criticized freely the molds used by the manufacturers, and with what results? Dr. Haskell has also offered a great many good suggestions, but how few of them were ever adopted? Dr. Williams's criticisms were confined mainly to the unnecessary number of molds and the unnatural morsal surfaces. This latter fault is especially marked with the bicuspids, it rarely ever being possible to secure satisfactory occlusion without extensive grinding. Then, again, the excessive contour given some of the molds on labial surfaces of bicuspids, cuspids and incisors is decidedly unnecessary and unnatural. This applies to plate and flat-back, as well as rubber teeth.

My individual opinion is that much more attention is given to the shading of the porcelain than to the study of natural tooth forms. Let us hope that Dr. Williams or some one will continue his cry for a much needed reform, and possibly the manufacturers will awaken to the needs of the profession.

Very truly yours,

CHAS. C. PATTEN.

Boston, Mass.

Editor ITEMS OF INTEREST:

Dear Sir—In the January number I notice your editorial on the manufacture of artificial teeth. It meets with my hearty approval, and I wish to say so personally.

It is a source of considerable trouble to get a good occlusion when we are compelled to use the tooth molds that are usually furnished by our dealers. I find the cusps are too short and most of the molars are too narrow bucco-lingually. I also have trouble with the lower anterior teeth being too wide for the upper set supplied with them in full sets. In

grinding molars and bicuspids to occlude we spoil the shape of the occlusal surface, and also the glaze is removed, which sometimes uncovers a porous surface. I hope the dentists of this country will get together and by so doing demand better product from the manufacturers.

I will take up this matter at our district meeting and urge upon its members to write you. Hoping you will receive numerous letters on this subject and that much good will come of it, I am,

Very respectfully,

R. L. TOWER,

Yankton, S. D.

Editor ITEMS OF INTEREST:

Dear Sir—I fully indorse the views as expressed by Dr. J. Leon Williams in the November, '07, issue of ITEMS OF INTEREST. It seems (with all the molds of teeth we have to select from) hard to find molds of the proper size and shape to meet the needs as required in each individual case. What is needed also is the training of the dentist to make up cases according to each individual personality, and not allow the patient to dictate as to size, shape and color, as ninety per cent. of our dentists do. Consequently we see people with teeth not any larger than a baby's temporary teeth and colors not in any way adapted to the complexion of the patient. The dentists are to blame. Our colleges are to blame primarily. The molars and bicuspids in seventy-five per cent. of the artificial sets of teeth are not large enough, or something is wrong in the size and shapes of mold. I trust there will something come of this suggestion by Dr. Williams. It is *needed*. I have felt the need for a long time, and have thought of writing to the S. S. White Company and Consolidated urging reform. We have too large a variety of molds at present, but in a large number the teeth are absolutely useless for human adults' cases. *I* would not accept them as gifts.

Yours truly and respectfully,

W. T. POAD,

Marshfield, Wis.



Discussion of President's Address.

Dr. J. Lowe Young. I have listened to the address of our president with much interest, and what little I will have to say will be along the line of gold and platinum vs. German silver in the construction of appliances.

It occurred to me first when in St. Louis that our appliances were not properly constructed with regard to size, and that started me on the idea of having them made a little different from those on the market. Then the question came as to a proper metal, and I talked with several about the use of precious metals in the construction of these appliances, and all with whom I conversed said: "You can not get anything to take the place of German silver for the expansion arch."

I happened to run across a man who was formerly in the jewelry business, who wanted to put his boy in my care for treatment. He said, "I will tell you one thing, you must not use any German silver in his mouth!" I said, "Then I won't treat your boy, because I have nothing to take its place." He replied, "Why not try spring gold?" I said, "I believe there is none of that material prepared that will serve the purpose," whereupon he asked if he might not make me some. He did, and I found it to be much better than the best German silver I ever had used. It is a little brittle, however. But it will retain its spring indefinitely when used in the mouth. You will all concede that the German silver expansion arch loses its spring materially.

I would no more think of using German silver clamp bands for retention than I would tin.

I think we have much to learn yet as to the gold appliances. The nuts on those I have used have not been entirely satisfactory. The threads of the screw and nut strip, particularly on the clamp bands. I have had no trouble with the arches. Of course, you do not need to use the force on the nut and screw of this arch that we do on the clamp bands. For the band material I think coin gold will be as satisfactory as anything. Of the same thickness as the German silver it will be strong enough for clamp bands, and will not deteriorate in the mouth.

I will say one thing—not wishing to be too enthusiastic with reference to the use of these precious metal appliances—I have had one case where there was a very marked action on the enamel of the anterior teeth, upper and lower, under precious metal arches. The patient came to see me once a week, and always after leaving my office she went to her dentist, who treated her mouth hygienically, and yet to my surprise after I removed the arches the enamel was found to be quite badly eroded on all the upper and lower labial teeth.

Dr. Ottolengui. How long had treatment lasted?

Dr. Young. Four or five months. The brother came at the same time as the sister, and in his case there was no difficulty. This is the only case where I have noted this trouble under precious metal. She was an extremely nervous patient, and I could not change more than one ligature at a sitting usually.

Dr. Pullen. I wish to pass around an all-gold retaining appliance made by Dr. Baker a number of years ago. It presents some very valuable points.

Dr. Lloyd S. Lourie. I wish before discussing the precious metal question to commend the first part of our president's address in which he refers to the period of transition we are passing through, changing from the old to new methods, and without attempting to enlarge upon his nicely worded simile, I would emphasize the point that there is a necessity for a great deal of tolerance and charity for other people's ideas. I will not attempt to say anything further in this direction, because Dr. Pullen expressed his thoughts so well.

The Doctor is right about the use of precious metals for appliances, and, as Dr. Young has suggested, the objections to using German silver for clamp bands. I think his experience with some of my clamp bands (especially when I used the clamp bands for occlusal spurs) may have confirmed his objections. You can not get enough reinforcing solder in between the teeth to prevent their breaking. Since then I have been using iridio-platinum for clamp bands, as well as for plain bands for moving and retaining teeth. The latter I have thus used for five years.

Effect of Metallic Oxids.

I have often wondered what effect the dissolving of German silver in the mouth might have on the system in general. The metallic oxids or salts are going into the system, and while there is no record of any bad effects the question has occurred to me whether there might not be some such bad effect that we do not know about. In contrast to this, however, we seem to have a beneficial local effect from the oxidation of German silver. As Dr. Young mentioned softening of the enamel under the gold arch, we may contrast that with the effect of wearing the German silver arches for longer periods, with no softening of the enamel. Perhaps the copper salts have some bactericidal influence in preventing decay. Dr. Harlan has recently called our attention to copper as a germicidal agent.

In general I believe, with proper prophylactic precautions, the precious metals are much preferable. German silver is objectionable from its discoloration.

Advantages of Iridio-Platinum.

To my mind iridio-platinum is better than gold, as gold will tarnish in many mouths when sufficiently alloyed to produce the requisite spring. Therefore, I prefer the iridio-platinum, even for the arches. If we could get a little greater percentage of iridium it might be used exclusively for expansion arches.

Another reason why I have used iridio-platinum almost exclusively for plain bands is that it is not necessary to be as careful in soldering. Then, too, the German silver band must be boiled in acid and polished; the platinum band is immediately ready to put on. Again, you can slip it off and replace it for retaining appliances. The German silver band will soon be corroded and weakened so as to be unavailable for further use. Another point, the German silver arch corrodes to such an extent as to form a rough lodging surface for bacteria, and not only can it not be kept clean and the mouth kept in good condition, but it forms a lodgment and starting point for decay upon the adjoining teeth. So I think, all points considered, the precious metals are better, and I prefer iridio-platinum to gold.

Of course, it is hardly fair at this time to say that German silver should not be used, as undoubtedly in many mouths it keeps as good a color as gold or iridio-platinum, but we can not determine beforehand which mouths will affect the metal, so we would better use the precious metals. The difference in expense, when we consider the scrap value of the appliances, is so little that it ought not to be considered.

None of us can take credit for first advocating the use of precious metals for appliances, as I remember in the last issue of the *International*

Dental Journal Dr. Trueman showed a great heap of orthodontia appliances used by Dr. Farrar, and they were all made of gold. Regulating appliances made of gold have undoubtedly been used for many years. But it is just as well to bring out their advantages so they may be used more generally.

Dr. Ottolengui.

I will say a few words with reference to the subject, because I have used the precious metals in the regulation of teeth more than I have used German silver, and those who may think of giving up the use of one for the other may be interested in my experiences.

The arguments against German silver are, first, that by corrosion in the mouth the fixture itself is lessened in bulk and thus weakened; second, discoloration of the teeth; and, third, the fixture itself may become discolored.

The first accusation against the German silver is the principle count, I think, because similar dissolution does not occur with the noble metals. So I will pass that. I think the stripping of the threads on gold appliances can be overcome by having the threads cut deeper. In fixtures that I learned from Dr. Kingsley to make from cleft palate cases, we depend on threaded wire and nut to hold the rubber to the metallic part, and we never had any trouble with either the thread on the wire (iridio-platinum) or the thread of the nut, which is made of clasp metal. It may be a good idea to make the screw of the clamp band of iridio-platinum and the nut of clasp gold.

Discoloration of Metals in the Mouth.

Now about discoloration of the metals. There is no doubt that you do get a good deal of discoloration in German silver appliances from corrosion of the metal, and you get the same, to a proportional extent, in gold that has an alloy in it; but there is another reason for the discoloration—it is a deposition from the mouth itself. In some mouths you can not keep German silver clean, and the peculiar, dark, metal-like stains can not be removed from the teeth without the assistance of pumice stone. Yet, last year I used the Angle appliances, gold plated, in the mouth of one little girl whom I only saw once a week, and not even the gold plating was removed. The appliances were clean, bright and beautiful during the entire period. In another case, where I used gold appliances and saw the patient twice a week, I cleansed once a week for the removal of stains. There was a deposit on the appliances from the mouth itself.

Influence of Contact.

I do not want it to go out that there was any real relation in Dr. Young's case, between the erosion and the use of the gold arch. I do not believe there

would have been any less erosion if German silver had been used. It was the result of the metallic arch not being removed for four months. It might have been stained besides if there had been present a metallic oxid, as from the German silver.

It is an old accusation against prosthetic dentistry that clasps ruin teeth. Bonwill pointed out many years ago that you could get as good use out of the clasp if it touched the tooth in three places as if it touched it all round, and claimed less chance for caries. The less points of contact you have in the appliances the better; a tooth which has been rotated needs to be held at only one point to retain it. Many apparently ill-fitting retention devices would be better for the teeth if scientifically applied so that the contact is at the point where needed and not throughout the entire structure.

There is more in this problem of the deleterious effect than the mere physical composition of the appliances. I think the one fact that the noble metals are apparently cleaner in many mouths, and therefore look better (because the discoloration is largely due to the oxidation), makes them preferable, but the principal point I believe is that they are stronger.

Dr. Abell. I have been looking for something better than German silver for bands in the mouth, and a few months age I began using aluminum bronze for molar bands, and I find that while it is a heavy oxidizer under heat and has a low melting point, yet when annealed it is as soft as gold and permits of ready burnishing and does not corrode in the mouth.

I have used retaining appliances with the lingual arch attached to the molar bands, one molar band of German silver and the other of aluminum bronze; the latter would invariably come out of the mouth much cleaner than the German silver, which was frequently almost perforated. This aluminum bronze will take a gold plate and keep it. What value it would have for Magill bands I do not know. I use it 8-1000 inch for molar bands, and have rolled some down to 7-2000 or 4-1000 for Magill bands, and am just commencing to test it now. This material is ten per cent. aluminum. For soldering, 14 k. gold solder is used.

Dr. Ottolengui. I would like to agree with Dr. Pullen in his suggestion that iridio-platinum appliances may be soldered with pure gold. That is something that Kingsley always did. Pure gold is stronger than solder, because it lacks brittleness. In its ductility you have added strength. The nearer you get to the melting point of the metal you are trying to solder the more thoroughly the solder will become incorporated with its surface.

Dr. Casto. I agree with Dr. Ottolengui as to the point he just made against the uniting of iridio-platinum with a low karat solder. I have had some trouble with the bands parting at the union when a low karat solder had been used, that is an 18 k. solder.

I enjoyed Dr. Pullen's address very much indeed, and wish to commend him for the beautiful manner of his introduction, as well as for bringing the subject of gold and platinum appliances before the society at this time. He informed me several months ago of his intention and I expected that he would be a little more radical than he has been. The subject was presented conservatively and scientifically. We always get something good from Pullen.

Regarding the qualities of the metals, it seems almost ridiculous to compare the qualities of German silver to those of the noble metals, the latter being far superior in every way.

I am inclined to believe that German silver has been used to a great extent because of its being less expensive than the noble metal.

The use of German silver for plain bands has been more expensive in my hands than the use of iridio-platinum. The German silver is more difficult to manipulate. It is much easier for me to fit and solder an iridio-platinum band than it is to fit and solder a German silver band.

After soldering an iridio-platinum band, it is practically finished, as it needs no polishing except where the band has been cut from the ribbon. It requires considerable time to clean and polish a German silver band after it has been soldered. The saving in time alone renders the use of iridio-platinum less expensive than the German silver.

Another important consideration in the use of iridio-platinum is the soldering of lugs or hooks upon the bands. If the joint has been soldered with pure gold, lugs and hooks may be attached with impunity so far as unsoldering the joint is concerned. With German silver it is quite different; unless great care is taken when lugs or hooks are soldered to German silver bands, the joint will open or the material will burn. There is special danger of this occurring when the hook is soldered on the labial surface over the joint for the use of intermaxillary ligatures.

About four years ago Dr. Lourie called my attention to the use of iridio-platinum for plain bands, since which time I have almost invariably used it. For retention, I use iridio-platinum and clasp wire. I do not know the exact percentage of iridium in the iridio-platinum band material. The manufacturers claim about ten per cent. iridium. I have found considerable difference in the working of the material from the different manufacturers.

The action of the fluids of the mouth upon the iridio-platinum versus German silver has been thoroughly discussed.

Dr. Kemple. I would like to ask Dr. Pullen what grade of hard solder he uses in soldering attachments to the platinum and gold expansion arch without affecting the temper or elasticity of the arch. My experience has been that in using hard solder on the platinum and gold expansion arch you anneal the arch to varying degrees, depending on the grade of solder you use.

German Silver a Preventive of Caries. In regard to German silver or nickel silver appliances, compared with the appliances made of the noble metals, German silver has been getting a black eye here this morning. I believe there is a soul of good in all things evil, and whatever the chemical action or causes may be, there is less tendency for teeth to decay when in contact with German silver or nickel silver than there is when those teeth are in contact with the noble metals. A few years ago the great majority of clamp bands that were used on the teeth by many orthodontists, were simply clamped on the teeth and left there for months without the precaution of using cement, and little or no disintegration of the enamel resulted. Unfortunately this is not the case if gold appliances are used in the same manner.

I have seen the disintegration of the enamel under gold and platinum expansion arches, and have never seen disintegration under the German silver expansion arches. In using the noble metals for regulating appliances, I feel the necessity of removing the arch more frequently for cleansing, than if that arch were made of German silver. The cause of this difference we do not know. What the chemical actions in the mouth may be, or what the electrical condition may be, we do not know; but the fact remains that in hundreds of cases where German silver bands have been clamped to the teeth, there has been no decay. I have one case in which I used a gold clamp band and left it for a comparatively short time, and there was disintegration of the enamel. There are several men present who can verify my statement with reference to the freedom from decay under German silver bands.

I use the gold appliances. I believe they have more desirable properties than the German silver, but I feel the necessity of watching the teeth more closely with gold appliances in the mouth than I do with German silver in use.

Dr. Abell. Speaking of erosion occurring under appliances. I would ask if you have ever found any trouble when a spur was thrown over on the enamel of a tooth?

I would suggest that you make all spurs knife-edged or pointed. When you lap the spur over, make the contact point as sharp as possible, or bring it over as a point; it can then be cleansed by the patient. Under such treatment you will have no erosion under either base or precious metal. The contact with the enamel is reduced to the minimum.

Dr. Barnes.

There is no question whatever as to the value of gold and platinum appliances from an anesthetic standpoint. There is a question, however, whether it is the most advantageous thing from the utilitarian standpoint. I have had experience for ten years in making appliances: I think to-day that clasp metal and German silver stand at the head. For some purposes I prefer clasp metal; for others German silver. I wish to corrobate the remarks of Dr. Kemple. I think there is less decay under German silver; it contains copper, which is known to be germicidal to some extent. There is too great a tendency to blame the metal or the apparatus for causing decay, or predisposing to decay. The real trouble is fluid, or the detritis within the fluids, caught under the apparatus, which ferments. We should remove appliances more frequently, as Dr. Kemple has advised, whether they seem to need it or not. The danger of the platinum appliance is, it may keep its color very well and yet may be covered over with food products.

I have had the experience of decay occurring under the iridio-platinum more rapidly than under the German silver appliances. Indeed I do not recall any caries occurring under German silver appliances. I rather think there is an electrolytic action where the platinum has gold attachments soldered to it. There is also danger from the German silver appliances, when they are gold plated. The deleterious effects are absent when the German silver is simply polished, without plating.

I prefer iridio-platinum bands for the incisor and cuspid teeth for esthetic reasons. For the bicuspids and molars, I prefer German silver. You will get better service out of German silver or platinoid for molar bands, etc. The point has been made that German silver appliances will get very dark in some mouths, and will not discolor in others. I have found in children from ten to fourteen years of age, that discoloration is most extensive: this is the period of the change of life with boy and girl. The fluids of the mouth are very obnoxious at this time, therefore, particular pains should be taken in cleansing.

The suggestion of Dr. Abell as to using the spur as a point, is a good one. I have followed this plan for a long time satisfactorily.

Dr. H. A. Baker.

It was not my intention to discuss this paper, but Dr. Pullen has made the subject so interesting it is more than I can resist.

My experience has been that gold regulating appliances tarnish quite as much as German silver, and the arch wire, unless you use platinized gold. is not as efficient as German silver. When you come to the anchor bands that is another question. If these were made of gold I think it would be an improvement. I also think that the combination of gold anchor bands and German silver arch wire would make an appliance pretty nearly ideal. My experience has been that the German silver anchor bands is that portion which oxidizes the most, but my idea is that this oxidization is beneficial rather than deleterious to the teeth. I cannot recall a case in which I ever had a tooth decay under a German silver band.

I would say that in that retainer of mine which Dr. Pullen is passing around, the cuspid and molar bands are made of 20 k. gold and the wire platinized gold.

Dr. C. A. Hawley. I have been using gold appliances exclusively for about eight months, and while I am enthusiastic over the final outcome of their use, I am not altogether satisfied with the materials. I have been using arches made by Mr. Aderer of New York. So far as efficiency is concerned, I believe they are much better than the German silver arch. They have greater resiliency, will hold their expansion longer, and I believe we may do as much work with the 17 gauge gold as with the 16 gauge German silver arch. They keep cleaner in the mouth, also. I do not think these arches made by Mr. Aderer are really clasp metal. I think they are nearly a 14 k. gold.

Dr. Young. It is a little higher karat than that.

Dr. Hawley. It is not what we have understood as clasp gold The metal is rather brittle, but from the point of efficiency there is little to be desired.

Dr. Ottolengui. How high a grade of solder can you use?

Dr. Hawley. When you get above an 18 k. solder you are approaching a dangerous point

Dr. Ottolengui. That is not a clasp gold.

Dr. Hawley. No, it really is not. Clasp gold is pure gold, and a small per cent. of platinum, and will take 22 k. solder.

Dr. Young. I do not believe there is one piece of clasp metal on the market made in that way.

Dr. Hawley. Our metallurgists define clasp gold as a compound of pure gold and platinum. Whether that gives the greatest amount of elasticity, I do not know.

In regard to discoloration, these arches, of whatever karat they are, discolor in some mouths. That is obviated by gold plating. When gold plated, they keep clean and bright.

As to a metal for clamp bands, I have been using clasp gold, and am not altogether pleased with it. I believe I have more of the bands break than when made of German silver. That is partly due to the fact that the screws I had were not satisfactory. They were of low karat, of same quality of gold as the arches, and would not take high enough karat of solder. Three or four years ago I was looking up the question of materials for plain bands. I thought I had a good one; it was composed of platinum, silver and gold, called platinum alloy. I commenced to use it for the plain bands. It seemed strong, but would break. I had a friend in the physical laboratory of the Ohio State University, who offered to test a number of metals for me. We took strips of iridio-platinum and clasp gold (S.S.W.) and German silver, as well as the platinum alloy, of same dimensions.

He modified a machine he had there that would grasp the ends of a piece of metal and pull it until it would break. It registered the point at which it broke, and the stretch as well. Now it surprised me to find the platinum alloy, which broke oftenest in the mouth, was far stronger than the German silver; nearly twice as strong, but the German silver, before it broke, would stretch three times as much as the other metal. The other metal would not stretch a bit; it was brittle. Iridio-platinum was very strong, and had a good deal of the stretching quality. Clasp metal had not nearly as much stretch as German silver, and was not so strong as iridio-platinum. There is a point. Is not that quality of stretching a very desirable quality in a regulating appliance? I believe it is, but only up to a certain point.

I do not believe, from the experience I have had, that coin gold is a tough metal, and I do not like it very well. We have not found just the right metal yet, I think, with which to make the ideal regulating appliance. We must also find a place to have these appliances made, and have them well made. German silver, I believe, has very desirable qualities, but they are not so great as to overcome the bad qualities of disintegration and discoloration.

Dr. Pullen. I have been much pleased with the discussion, so far as it has gone, and will be pleased to hear more from the members of the Society regarding this subject as their experience in practice with the all-gold appliance increases. I do not claim to have completely thrashed out the subject, but I know we are on the right track, and that this is the main thing.

I shall be brief and concise in closing, because so many of the points

I intend to use have been spoken of by members of the society in their individual discussions.

I thought of one thing while Dr. Young was discussing the subject; that is the credit which should be given for some of these things, and I neglected to mention in my address that to Dr. Young belonged credit for the use of the smaller gauge arches in our work. It is a matter of history.

To Dr. Lourie belongs the credit for the first use of the iridio-platinum for plain bands. If there is any question regarding the matter, I want someone to make a statement to that effect. If these things are made a matter of record at the proper time, they do not become questionable later on.

The experience of those of us who have been working with the noble metals has, of course, been varied. I do not think it has been extensive enough, so that we can form absolute conclusions as to which of the noble metals are the very best to use in the different positions in the mouth. They would require different degrees in temper, elasticity, hardness and softness, etc., but we have arrived very near it.

In speaking of the cases in which marked deleterious action on the enamel had taken place on teeth where gold had been used for the appliances, I will say that in my experience I have never had a case of that kind. I am sure it does not apply in any extensive way. It is due to the conditions in the mouth, whereby there would be the same deleterious action whether gold or any other metal were used.

I did not intend to claim to be a pioneer as to the use of gold for regulating appliances. We all know it had been used by dentists before orthodontia, as a specialty, existed. We must get back to something that was good once and is good still and something preferable to German silver, for our appliances.

I think the points made by Dr. Ottolengui, in regard to the method of manufacture of these parts, well taken. He referred to the stripping of the threads of the gold screw, etc. Sometimes there appears to be a frictional quality, which may be overcome by using an iridio-platinum screw and a gold nut on the lingual surface of the molar clamp band. I find platinum is absolutely worthless, as it is too soft; the threads twist off with the least bit of pressure on the nut. We must get a hard alloy of gold or platinum in order to secure threads that will stand. I think one trouble in the stripping of the threads has been in the lack of care in their making.

Suppose a goldsmith manufacturer is just starting in making these all-gold arches; he takes care of the percentages in his alloys, but he neglects the fine mechanical parts, failing to get the threads and nuts

accurately made so that they will hold. The manufacturers of German silver regulating appliances have by experience overcome these troubles by using perfected machinery.

The point was mentioned as to deposits on the arch. I have noticed these many times. It is often something from the mouth that is deposited. I never have had it examined.

I confess I do not know anything about aluminum bronze, but will be very glad to know if it has any more valuable qualities than mentioned by Dr. Abell, but it can hardly be compared with the noble metals for appliances.

Dr. Casto spoke of the cost of German silver compared with gold, and indicated his preference for the gold and iridio-platinum as an investment. It is somewhat of a satisfaction to know that every purchase of gold or platinum is a cumulative investment.

In regard to the grades of solder used on various parts of the appliance, I have here one of the iridio-platinum molar clamp bands, and soldered to the buccal surface I have a gold and platinum tube, and between the tube and band is soldered a 14 gauge short piece of pure platinum. It is designated as a pivotal tube anchor clamp band. I use this apparatus in Class II and III cases to tip up the tube without unsoldering from the arch. That little piece of platinum can be soldered to the band with pure gold, and you can use a solder which will flow at lower degree of heat on the other side to attach the tube if you wish.

Here is another point. If you were soldering on the lingual screw, if made of iridio-platinum, there is an advantage in using pure gold. Metallurgists weld pieces of platinum together. The nearest we can approach that is by the use of pure gold for the purpose. I have not used anything under an 18 k. solder, grading down from 22 k. for the different soldered attachments.

Dr. Kemple. You spoke of using hard solder in making attachments to the arches and still retaining the full elasticity of the arch.

Dr. Pullen. There is a trick about that, and perhaps you know it. If you wish to use 18 k. solder in attaching an iridio-platinum hook you may do so, and by just polishing up the arch on your lathe you can restore the temper.

Dr. Kemple. But you have affected the temper in the whole arch.

Dr. Ottolengui. You must heat the whole piece up to one glow, and give the same molecular treatment to all of it; then polish on the lathe and the heat of the buff will restore temper.

Dr. Pullen. Dr. Kemple has found one case where the enamel has been harmed under a gold band.

Dr. Kemple. I have only used the gold band without cement in one case, and then for a short time, because I was compelled to slip the band on and leave it for a limited time only.

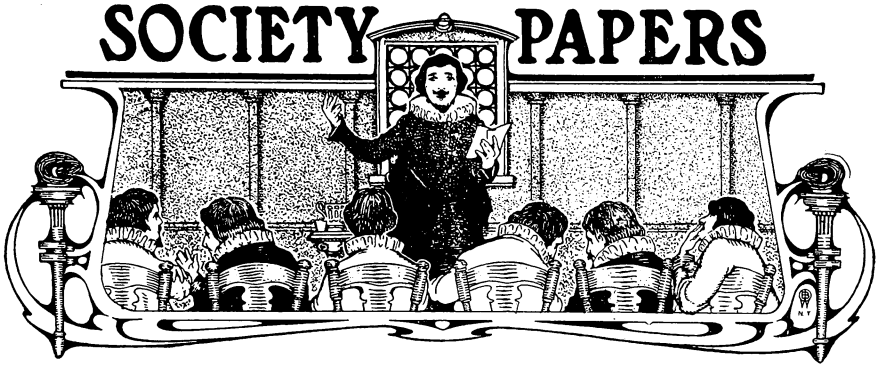
Dr. Pullen. In those cases mentioned where gold has been deleterious, they have been so much smaller in percentage than similar cases of trouble occurring where German silver was used, that I do not think they are worth more than a slight consideration. The thought has also come to me that we need more prophylaxis in treating our cases under both German silver and gold. We do not give them the prophylactic care they need. The up-to-date dentists are much more interested in prophylactic treatment and care of the teeth than they were five years ago. Many of my patients are instructed to go to their dentists for prophylactic treatment, necessitating that I remove the appliances and reattach them, etc.

Dr. Hawley. Do you mean that you take off cemented bands?

Dr. Pullen. I do not make a practise of it, but there are men who claim to be specialists in prophylaxis, and I have had to explain to them the bands were cemented on and the teeth were cared for in that way.

I believe that in the four points of efficiency, durability, esthetics and cleanliness, gold and platinum alloys excel and will always excel. We are getting at this matter in a scientific way, and in the next five years I think there will be a great many gold and platinum appliances used, and I am sure we will find the perfection of materials in the noble metals for appliance construction as indicated in my address.

SOCIETY PAPERS



Syphilis of the Mouth.

By H. J. WALLHAUSER, M.D.

Read before the Central Dental Association of Northern New Jersey.

The pathology of syphilis affecting the mucous membrane of the mouth is of the same character as the cutaneous manifestations of this disease, but on account of the difference in anatomical construction the clinical appearance of the lesion formed is different from those appearing as a part of the eruption on the skin.

Apart from the constitutional effects of this disease, the mouth is the next in importance. It is here that we see—in many cases—the earliest lesions, and in late syphilis the most persistent evidences of the disease are here encountered. By carefully observing the buccal mucous membrane we are aided in treatment, as in many cases the disease is continud *here* after all other signs have disappeared and the patient has regained his former healthy physical condition.

Infections.

From the standpoint of infection, the mouth may be considered of more importance than any other region of the body, since here we have to guard against *direct* infection by contact with the lesion and also the saliva in which the infection may be conveyed and transferred by various utensils—as cups, glasses, knives, forks, etc. In fact, any article coming in contact with the saliva may be the means of infection; an abrasion of the lips or mucous membrane rendering the person more liable to such infection. When we consider all these facts we must realize how important it becomes to be able to recognize the various *manifestations* of syphilis as it affects the mouth.

Early Stages of Syphilis.

The earliest lesion of syphilis is the chancre, which occurs at the point of *contact* with the infection. Next to the *genital* region the mouth is the most common site for the *beginning* of this disease.

On the lips it is a hard, rounded, somewhat raised, superficially ulcerated lesion, with more or less infiltration. The latter causes a protrusion of the lip, which is a very characteristic condition of chancre in this location. It is quite sudden in its onset, and commonly appears at the site of a previous abrasion, as, for example, a *herpes febrilis,* or cracking of the lips. Initial lesion in this location is always accompanied by enlargement of the neighboring lymphatic glands, especially those beneath the lower jaw, causing pain on pressure and, if severe, stiffness of the jaw.

The picture thus formed, consisting usually of a single sore, with raised borders and superficial ulceration, more or less protrusion of the lip, can scarcely be confounded with any other disease. (When multiple lesions are present they are usually situated on opposing surfaces of the lips.)

The only condition that may give rise to difficulty and which has been mistaken for primary lesion of syphilis is epithelioma. Here we may have a single hard infiltrated lesion, with superficial ulceration, which, on casual inspection, can scarcely be found to differ from chancre. The main diagnostic feature is the method of its appearance and development. Epitheloma is of slow growth, usually beginning as a roughened scaly lesion, which gradually infiltrates and enlarges. In advancing to the size of a chancre, or dime-sized, it requires between six months and a year. This history is so different from the sudden onset of the initial lesion of syphilis that a mistake can be made only by carelessness if this fact is borne in mind. Furthermore, while the lymphatic glands may be enlarged in epithelioma, it is of late occurrence.

Other locations which may be the seat of the primary lesion are the tongue, gingiva-labial fold, gums, soft palate and mucous membrane of the cheeks. These various locations are affected in point of frequency about in the order named. The clinical appearance varies somewhat, according to the location.

On the tongue it appears as an ulceration with only slight infiltration, unless the anterior portion is involved, when induration is a marked feature. The border of the ulceration gradually fades into the surrounding tissues in the superficial ulcerations, while in ulcerations that are more or less rounded, or crater-shaped, the border gradually slopes inward.

Chancre affecting the gingiva-labial fold, gums, soft palate and mucous membrane of the cheeks is similar in appearance to that described as affecting the tongue.

Adenopathy is a prominent feature in all cases of primary syphilis. Chancre of the tongue is accompanied by involvement of the subhyoid and submaxillary glands, producing extensive and firm cartilaginous-like hardness of the tissues in this location. Chancre of the soft palate is accompanied by involvement of the glands at the angle of the jaw.

Diagnosis. Diagnosis in these locations may be somewhat doubtful. It must be differentiated from tuberculosis, ulcerating gumma and dental-node, with or without ulceration.

Tuberculosis is a deep ulceration, with sharp-cut, ragged borders. Chancre is a superficial ulceration, with ill-defined borders. The border of chancre is infiltrated and gradually fades off into healthy tissue, while the border of tuberculous ulceration may be raised and sharply defined. Tubercular ulceration is usually accompanied by constitutional derangement. The patient is thin and poorly nourished and physical examination usually reveals the presence of tuberculosis in the lungs.

Gumma. Ulcerating gumma of late syphilis may simulate chancre, and it is often important to differentiate. A previous history of chancre would, in most cases, establish the diagnosis in ulcerating gumma. Unfortunately, however, this is not always obtainable. We frequently see cases of syphilis in which a history absolutely negative is given. The initial and early lesions may have been so slight as to have escaped the notice of the patient, or, as sometimes occurs, the early lesion may be situated in the urethra or extra genital, where it is very apt to be treated as a gonorrhea. If the succeeding eruption be slight no further notice is given the disease until the late lesions appear.

Gumma of the tongue appears as a hard, painless elevation, which later ulcerates, producing a deep, crater-like ulceration discharging a yellowish pus. The deep ulceration, situated in a hickory-nut sized elevation, will usually readily be distinguished from the superficial ulceration of initial lesion. The absence of adenopathy is also a strong point in favor of gumma, which is seldom accompanied by enlargement of the neighboring lymphatics unless there is a general adenopathy, when enlargement is slight compared to that accompanying initial lesion.

Dental-node. Dental-node, or traumatic ulcer, is the result of irritation produced by a broken tooth, or malformation causing the teeth to play on the tongue. These lesions are situated on the sides of the tongue and consist of hard

callous masses, which may be felt rather than seen, with deep linear ulcerations traversing the infiltration in various directions. They rapidly disappear on removal of the cause. If a malformation—removal, or, if possible, correcting the angle, or grinding off the projection will be necessary. If the ulceration persist, deep cauterization may be required. The deep linear ulceration, in a hard nodular mass, is so characteristic that this condition may be readily distinguished from initial lesion. Almost immediate improvement on removal of the cause would do away with all doubt as to the exact nature in uncertain cases.

Symptoms of Syphilis.

Thus we find that the primary evidence of syphilis is an indurated lesion, no matter where situated, with more or less ulceration, although the latter is not always a constant feature. Considering the various locations, the infiltration is most marked when it affects the lips and tip of the tongue. On the buccal mucous membrane and posterior half, infiltration is not so marked, but if we remember the sudden onset and involvement of the neighboring lymphatic glands, which is always a marked feature, accompanying the initial lesion of syphilis, we can readily and positively distinguish between the slow insidious and progressive character of epithelioma and tuberculosis. Dental-node will offer some difficulty, but the presence of a projection or a roughened tooth playing on the situation, with the deeper infiltration and ulceration, with blotter-paper like coating, should establish the diagnosis between these conditions.

Having now considered the early, or initial stage, let us next inquire into the character of its consecutive manifestations.

Stages of Syphilis.

Syphilis was formerly divided into three stages, namely, primary, secondary and tertiary. This division has gradually fallen into disuse, for the reason that no hard and fast line can be established between the various forms of eruption. In fact, the so-called secondary eruption may appear while the primary is still present, and the so-called tertiary lesions may appear during the course of the secondary manifestations of the disease.

For the above reasons, recent authors on this subject are inclined to divide the various eruptions of syphilis into "initial lesion or chancre," and the subsequent eruptions into "early and late consecutive lesions." Of course, this division is not without fault, the same difficulty existing as with the older classification. However, the change is to be preferred, as doing away with the former belief of three positive stages, rather than a progression of the same pathological condition.

Early Consecutive Lesions.

The early consecutive lesions appear about from four to six weeks after the appearance of the primary lesion. The interval is known as the second incubation period, in contradistinction to the period intervening between the time of contact with infection to the appearance of the primary lesion, first incubation period; this has been placed at twenty-five (25) days, although liable to wide variations. Test experiments have shown a case to follow with primary lesion in eight days, and some are reported even less (one in 24 hours), while some other experiments showed an incubation period of ninety days.

The consecutive lesions affect the skin and mucous membrane of the mouth and are practically the same, but on account of the difference in anatomical structure there is a difference in appearance and course. The mouth, on account of heat and constant moisture, produces changes in the superficial epithelium entirely different in appearance to the same eruption on the skin. Of the early lesions, which generally occur during the first year of the disease, we have the milder form of eruption—as the erythematous, macular, papular or pustular.

These early eruptions are usually quite general and symmetrical, run a definite course and disappear without scarring. The macular eruption is usually the earliest lesion. The macules are pea to dime sized and can most readily be observed on the flexor aspects of the arms, back and abdomen, although the general cutaneous surface may be involved. The eruption is of a mild red color and very slightly, if at all, raised.

The papular variety either develops directly from the erythematous or appears as a primary eruption. Commonly both are present at one time. The lesions of this eruption vary in size from a pin's head to an inch in diameter and, like the macular, is general and symmetrical in distribution. After a certain time exfoliation begins, producing scaling lesions resembling eczema in some cases, especially in palmer lesions.

The pustular syphilide may follow the papular variety or develop as such. It is most commonly seen in patients who are poorly nourished and, like the preceding eruptions, is general in distribution and consists of lenticular or miliary pustules, or larger crusted lesions.

The mouth may be involved with any of these forms of eruption and may also be the earliest situation for the eruption to appear.

The erythematous variety occurs on the posterior parts of the mouth as a diffuse redness with a sharp outline. It may be seen involving the mucous membrane, over the soft and at its junction with the hard palate, or upon the pillars of the fauces or extending to the uvula, which may be slightly swollen. Occasionally we find several sharply defined reddened macular spots which run together to form patches with sinuous outlines,

or there may be disseminated punctate spots on the cheeks and over the vault. From the delicate nature of the epithelium the erythema assumes a grayish color, becomes raised and exfoliated, and we have produced the second variety of eruption, termed erythemato erosive plaque, which appear as superficial, more or less denuded areas of irregular size and shape; these lesions may involve any part of the buccal mucous membrane, but are commonly seen on the lips, the hard and soft palate and pillars of the fauces.

Mucous Plaque.

All varieties of the early consecutive or initial lesion, if not aborted either by treatment or natural immunity, resolve into a final stage of quiescence before resolution, and may remain present for an indefinite period. The lesion thus formed is termed a mucous plaque, or patch, and constitutes a type of lesion entirely distinct from the lesions appearing on the sutaneous surface, *condyloma lata.* The early cutaneous eruptions appear and run a definite course, disappearing in from one to three months, without treatment. The mucous plaque, however, may persist as the only evidence of the disease for years. Its recognition is, therefore, important since it may be the possible cause for reinfection of the patient and is, at the same time, the most contagious of all the consecutive lesions.

The mucous plaque is a superficial ulceration, with a grayish opaline loosely attached exudate, composed of young cells and detritus. The lesions are round or oval, but may be irregular in outline. They are usually even with epithelium in most cases, but owing to the cell infiltration and exfoliation of the upper layers, together with congestion of the capillaries, we have a variety of lesions developed which differ in the clinical picture to the simple or flat opaline plaque. The varieties thus formed are:

The papular type, due to a cellular infiltration of the papillary body and increase in the mucous papillæ, giving rise to a slightly raised lesion covered with a grayish white exudate or false membrane. When this false membrane, together with the upper layer of epithelium, is exfoliated, we have the condition which is the most frequent form of the early consecutive lesion, namely, the papulo erosive plaque. It is a sharply circumscribed infiltration, with a moist, or shining bright or brownish red surface. This surface becomes covered with a thin coating which is exfoliated and renewed for an indefinite period. If, on the other hand, the round cell infiltration continues as a chronic process (without erosion) the papillæ become elongated, the epidermic layers remain unshed and become thickened and we have developed the papulo hypertrophic

plaque. This condition persists as a raised, uneven lesion for an indefinite period or until persistent local and internal treatment are instituted.

The diagnosis of mucous plaque is usually not difficult. There are no hard and fast rules, however, to conclude a diagnosis. The sharply defined grayish patch, without inflammatory zone, which may be slightly raised, is unlike any other condition. Simple aphthæ, or canker sore, may, in some cases, give rise to doubt, but the inflammatory zone, with sharply defined cut-out like ulceration, should easily establish this condition. Canker sore is usually very painful, while syphilis is only slightly or not at all so. In fact, the patient is usually unconscious of any unpleasant symptoms from mucous plaque, unless irritated by smoking or highly seasoned food.

In differentiating the superficial ulcerative form, with polycyclic borders, we may mistake the condition known as *exfoliatio areata linguae*. This disease usually begins in childhood as a small elevated patch, not as large as a mucous patch, and rapidly spreads, developing a broken, ring-like lesion. The spreading border is grayish-white and slightly raised, while the central part of the lesion is smooth.

The superficial character of this condition, with the history of rapidly changing character of appearing and disappearing rings, or half-moon shaped lesions, without subjective symptoms, will readily define this condition from the superficial form of ulcerative syphilitic mucous plaque. (In the later part of the disease we have the mucous plaque appearing as a dry, smooth, persistent, bluish-gray patch.) The common locations are the borders of the tongue, cheeks and lips. This resembles the simple leukoplakia.

Leukoplakia.

The differential diagnosis between leukoplakia, non-specific, and the mucous plaque of this variety is extremely difficult, inasmuch as we see conditions in syphilis which cannot be clinically pictured as differing from the non-specific variety. This has given rise to considerable speculation. Some authors have claimed that all varieties were of specific origin, with an added irritant—as smoking, etc. In fact, smoking is known to be the exciting factor in syphilis, as well as the non-specific variety. I think we might readily have a variety of mucous plaque due to irritation from various causes not necessarily specific, but due to a stimulation of the same physiological functions by the invasion of micro-organisms; and we may shortly expect this subject to be cleared up by careful microscopical examinations of the lesions, for the specific germ seems, at last, to have been found in the *spirochetae pallida*. We should treat cases of leukoplakia as suspicious of syphilis, where the diagnosis cannot be positively made to the contrary.

Gumma.

Gumma of the tongue is a somewhat rare affection, which fact is probably due to improved methods of treatment. We do not see the awful results of syphilis that occurred years ago, when mercury was pushed to the point of salivation. Furthermore, the laity have been educated regarding the treatment, and of all diseases that the body is subject to syphilis stands first in regard to benefit from the same. This is a strong factor in treating this disease, as the patient, on stopping treatment, is at once conscious of a depression, which disappears on renewing same, and I think it a wise plan to let the patient know the full extent of damage which will result if treatment is neglected. Also tell him that his condition is not beyond repair. One of the worst features of syphilis is the neurosis or dread which is developed from the knowledge of possible recurrences of eruption. A patient who has been entirely unconscious of his ego will now carefully examine himself, ascribing every slight symptom which is unusual, or the appearance of every pimple, to his disease. Even a considerable eruption, such as marginate eczema around the scrotum or a leukodermia, which he has had for years and never noticed, becomes a part of his ailment. This condition is unfortunate and it would at first seem wrong to impress him with the danger of neglecting treatment by information of possible future outbreaks, but as his general condition improves this symptom disappears, and he is none the worse for having been scared—so to speak—into a rigid course of treatment.

The gumma, when it occurs, is one of the most important lesions of syphilis to recognize, especially when it affects the tongue, as it resembles other ulcerating conditions, which are fatal, and itself is fatal in some cases on account of the destruction caused, if not treated. It appears as a hard mass in the mucous, sub-mucous or muscular tissue, and after elevating to form a nodule, varying from a pea to a walnut, or larger, it breaks down, discharging a mucilaginous material, when it advances rapidly and may involve the whole tongue and palate.

It must be differentiated from epithelioma and tuberculosis. The main features of distinction are:

1. Gumma occurs on the dorsum of the tongue. It is often multiple, follows infiltration, sloughs rapidly and becomes deeply excavated. It is not very painful. In fact, the absence of pain in sloughing syphilitic lesions is an important diagnostic point. The borders of ulceration are thin and abrupt, with undermined edges. The base presents a grayish adherent mass of detritus. The edge is swollen and red.

Epithelioma is usually on the border of the tongue. There is

usually a previous history of a warty growth or leukoplakia. It advances slowly. Ulceration is slight and superficial, except in advanced cases. Lancinating pains are a prominent feature. The edges are thick, elevated and irregular. The base of the ulceration is reddish and yellowish.

Tuberculosis is usually located on the tip of the tongue. There is no history of preceding tumor. It begins on the surface as small, elevated tubercles, advances slowly. The border is flat and jagged. The base of the ulceration presents minute granulations, some undergoing caseous degeneration.

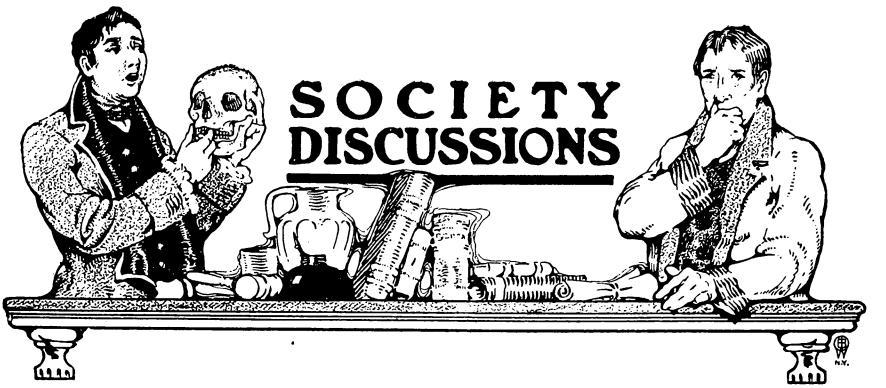
Thus we find three diseases, presenting somewhat similar clinical conditions when considered as a whole, but which differ in essential features.

Gumma is a rapid ulceration, preceded by a nodular swelling, producing a sharply defined ulceration.

Epithelioma is a slow, superficial ulceration, preceded by a warty growth or leukoplakia, producing an uneven ulceration, with elevated borders; while tuberculosis begins on the surface, without preceding tumor, and presents a granulating-like ulceration.

By bearing in mind these main distinctive features we can usually distinguish the condition in hand. Where there is any doubt we can positively establish the diagnosis of gumma, or, in fact, any of the lesions of syphilis, by instituting treatment. This is an important point to remember and will, sometimes, prevent a grave error in diagnosis.

I can remember several cases which would have either terminated fatally or have been operated upon for the removal of the tongue were it not for the above test. It is a simple matter to place the patient on syphilitic treatment for one or two weeks, when, if the lesion is one of syphilis, an improvement will be observed. Especially in gummatous lesions the improvement is quite rapid and can even be observed in one or two days. The patient will tell us that he is feeling decidedly better. These patients, even while not conscious of any subjective symptoms, although many are depressed and become tired on the slightest exertion, will tell us that they notice a feeling of well-being after instituting treatment, which cannot be defined, but, in practice, is of the utmost importance in judging the beginning of improvement and its continuance. In fact, so long as a syphilitic patient feels well, eats and sleeps well, there is very little cause to worry, even if his symptoms disappear slowly. It is far better to allow a longer time for recovery than to increase the doses of mercury or iodide until, in many cases, the physiological functions are pushed beyond control and debility ensues from salivation, gastritis, etc.



Central Dental Association of Northern New Jersey.

A regular monthly meeting of the Central Dental Association was held at Davis's Parlors, Newark, N. J., on Monday, October 21, 1907. President Marshall called the meeting to order and announced that at the November meeting a paper would be read by Dr. Wallhauser entitled, "Syphilis of the Mouth," that the physicians of the county were to be invited, and suggested that each member of the association invite his family physician to attend the meeting.

The secretary then called the roll and forty-five members were found to be present.

The minutes of the April and May meetings were then read and approved as read.

The Executive Committee reported favorably upon the applications for membership of William B. Schuetz, D.D.S., 48 Fulton Avenue, Jersey City; and Harry Hobben, D.D.S., of Ellison Street, Paterson, N. J.

On motion the secretary cast the ballot of the association and the president declared both of these gentlemen duly elected to membership.

Dr. Power then read his paper.*

Discussion of Dr. Power's Paper.

Dr. B. F. Luckey. The discussion of such a paper as this seems to me to be uncalled for, unnecessary, impossible. Dr. Power has given us an ideal, a high ideal: an ideal. I think, that is so far above the heads of many members of our profession that perhaps it is not a practical ideal. He has presented it in an academic form, and if I have any excuse whatever for taking up your

*Dr. Power's paper appeared in the January number.—Ed.

time it may possibly be in approaching this subject, as I have suggested, from a different angle. In talking to you to-night I think I am justified in approaching the subject as I would if I were discussing the matter for my own personal, selfish ends. We are not students of the ancient philosophers; there are not many of us who know about Josephus. I venture to say there is not a man in the room to-night who could give the Hypocratic oath. I venture to say that few of us know much of the old philosophers or astronomers of the olden days. Our lives have not been cast along those lines; we are practical, hardworking, everyday people. If we have ideals, they are those which lead us to work for what we regard as success. There are as many ideals as there are men. We are all cast in different molds, although we may be made of the same dust. Your ideal may not appeal to me. But I have an ideal; if we might compass it in a word, it is "success," let that mean what it will. We may aim to be successful, particularly in a professional way, success in that line meaning the attainment of a position that will place us side by side with those men of note who have gone before us and whose names remain with us to-day. Men who have made dentistry what it is as a profession. Men whom every young man of the profession aims to equal or at least approach and touch the hem of their garments. Go back to Webb, Dwinelle, Atkinson, Varney, and others, whose names I do not at this moment recall. Do the names they have left behind them spell success to you? It would to me. Were my name to be placed side by side on the tablet of dental fame with those men I should die happy, and even if I did not leave a dollar behind me I should consider that success.

Need I go further, gentlemen? Is it necessary in talking to a company of dental practitioners to seek for ideals? Is it necessary for the encouragement of the younger men to go further and seek another? It seems to me not, and if not, what more remains to be said but that the young man should place his ideal, his conception of success, on that summit where he can see constantly these names of men whom he hopes to approach. That will stimulate him in his daily work to do the best that is in him. To perform his operations with the same fidelity, the same devotion that he would if his only hope of reaching that summit depended on that single operation. (Applause.) If he were to do every piece of work that he has to do with this in mind, regardless of the remuneration he received for it, casting aside all mercenary motives or ideas, apply himself to the work as if it were his only lifework, given good health, do you think he would fail in attaining his object, and if he did reach that success does it not necessarily follow that he would have attained his ideal?

He should not strive to be the richest man in his profession. That may be all very well if one can add it to professional ability, but if he seeks for success along dental lines, I should set up as his ideal one thing, and I should blazon this one thing in great letters so that he never could fail to see it, "Be a dentist, and be the best dentist there is in the land." (Applause.)

Dr. H. S. Sutphen.

I enter into the discussion of this paper with a great deal of timidity. I have heard Dr. Power speak a number of times, and have had the pleasure of knowing him for a number of years, and I do not think I have ever heard from his lips such an extremely able address as he has given us to-night—one so worthy of our most sincere commendation in its phraseology, in its presentation and in its subject matter.

What we are aiming at as dentists is success, but how shall we attain it—in the material way or in the true professional spirit? A definition of success in life was given to me several years ago by a layman, which I have never heard excelled. He gave me the difference between a professional and a business man's idea of success. He said, "With the professional man the first object, the ideal, is to benefit mankind, to be of some use to mankind, and the financial consideration is secondary," but he added incidentally that the financial result would follow as surely as night follows day. He said that a business man's first thought is, "How much money can I realize from a certain deal, or a certain course of action?" The good of humanity is secondary. That is the distinction between the ideals of professional and business life. Our true ideal is the betterment of mankind, what we can do to increase the pleasure, the comfort and longevity of our brethren.

I know success is often measured in the world by material results and the amount of dollars one is able to acquire, but that is not true success. As has been said by the essayist, the charlatan, the advertising professional man (if you can call him a professional man), will make many more dollars than we can in our professional life, but we do not consider that success, nor does the world so regard it. True professional success can be summed up in this one paragraph: to do the best we can for humanity, to let every operation we perform be done as if it were the last we should ever do, and the one by which we would like the world to judge whether we have been successful or not; to regard the financial reward as an entirely secondary matter, to direct our efforts and our lifework toward being a good dentist in the true sense of the word.

I have often been very sorry to see young men, fresh from the colleges, going into advertising lines, for many of them could make a great success if they would follow ethical lines of practice. They would be

more satisfied with their own lives, they would be esteemed by the community, they would raise the standard of the profession which they pretend to love. When one is working for material ends does he really love his work? Does he do it for the sake of his fellow-creatures or merely to accumulate a few dollars?

Some years ago I read of the millions and millions of dollars some of the rich Romans spent upon their palatial homes and ancient mansions. They are unknown to-day except by close students of ancient history; the world has lost track of them entirely, whereas such men as Socrates, Hippocrates and Aesculapius, and men of that character, who worked for the uplifting of their fellowmen, are remembered to-day and will be remembered as long as time endures. The golden rule is the one we should keep in our work, the rule which says, "Do unto others as you would have them do unto you." If you follow that you could have no better ideal in professional life, it is the one thing that brings the consciousness to ourselves that we have done something for humanity. Look over your professional life, think of the largest fee you ever received, and then think of the finest operation you ever performed, whether for a charity patient or for your richest patron, and which will give you the greatest satisfaction when you look back on it, the money you received or the operation you performed?

We are in dentistry because we love it? Do we love dentistry or money more? Is our idea to do good to ourselves and our brethren or is it to get a great name as a moneyed man? There are few dentists who have died rich, but there are some who have died with a great name for their professional skill, who had their ideals, their desire to improve the profession and place it upon a higher pinnacle; and whom of these do you regard as the greatest, the few who died rich or those who spent their lives in elevating the profession?

I wish to thank the essayist for his most beautiful presentation of this subject, for I feel that I have been personally benefitted by hearing it, and I shall always remember it with a great deal of pleasure. (Applause.)

Dr. Palmer, New York.

I can not say much more than has been said, but it has been running in my mind that our very meeting to-night bears out a point that Dr. Power wanted particularly to emphasize. We certainly would not come here, meeting after meeting, if we did not have some of the higher ideals he has endeavored to portray. You can take to yourselves great credit in being able to bring before your meeting such an essayist as Dr. Power, and we can all heartily congratulate ourselves on having listened to such a paper. (Applause.)

Dr. R. M. Sanger. I did not expect to discuss this beautiful essay, but as the essayist was speaking there was a poem running through my mind which says:

"Lives of great men all remind us
We can make our own sublime,
And, departing, leave behind us
Footprints in the sands of time."

The essayist's thought is a beautiful one, and carries us back far into the past, but I think he meant us to make personal application of it.

As I understand it, the problem of life is one of character building, building one's own character; and in the way we build that character, in the kind of character we make in our association with mankind, in our ministration to our fellowmen, in just that degree do we make success.

That sums it all up. What are we to our fellowmen? The answer is, how much success have we made in our life?

If we have been helpful and have aided in helping mankind and making it better and stronger, we have made a success; if, on the other hand, we have taken all that came our way and appropriated to ourselves alone we have not made a success.

The essay carries with it many lessons, many beautiful thoughts that we can take away with us and strive to make the means of lifting us up to the higher level, of making us better men and better brothers to one another so that it may be said of us when we are gone that we were successful men, not because of material riches left behind us, but because of the beautiful influence our lives had upon our fellows in helping them upward and onward. (Applause.)

Dr. Chas. A. Meeker. The presentation of this paper emphasizes a fact of which I am very proud, and that is the entire independence of this society. I do not believe any other society in the country up to the present moment has ever listened to a paper with so many beautiful ideals as that of to-night. We all have our ideals, and my ideal in dentistry is to so consolidate all ethical dentists in one great body that each may be elevated and the non-ethical or fakir may be done away with.

That time is coming. The formation of the Plainfield Dental Society makes seven different local societies in our State, a little State with only fifteen hundred registered dentists in it, and is a great step forward. When we can bring together all the men in the State who will work for the uplifting of their profession and the elimination of the fakir, we shall

do a great work and educate the public to go to the ethical and professional man.

I thank Dr. Power for his paper to-night.

Dr. Fowler. Several years ago, when I was about to enter dentistry, a medical practitioner who was advising me in regard to taking up the work gave me as my ideal this little thought: "Go to school, learn to do everything that anyone else can do in dentistry, and then do it better than they do, if you can."

While I have not been able to reach the pinnacle of success, yet I think it was an ideal well worth working for, and it is something which I think others might take to themselves. To do everything the other man can, and do it better than he can.

Dr. Taylor. As I listened to the paper to-night, Dr. Talbot remarked to me. "What a beautiful paper, what a wonderful treat." It is certainly a very different paper from very many that we have heard and as I listened to it I was reminded of the words of Bishop Fowler at the close of a lecture he delivered to a class of young men just ordained to the ministry. Some one said to him, "Bishop, you are very far above us, it seems to me you put the hay in the rack rather high for some of the colts," and the Bishop replied, "Never mind, it is good for the colts, it will make them stretch their necks." So I think it is with this paper, it will make many of us stretch our necks to realize that for which we are to work.

As the essayist was speaking of the perfection of the rose carved on the summit of the temple I thought of the words of Phidias when he built the wonderful Parthenon. In one of the niches of the entry he carved the statue of a god, and the back of the statue was carved with wonderful beauty and perfection and given just as fine a finish as any other part, and someone said to him, "Why did you spend so much time and skill on work which will be hidden from our sight?" and he replied, "Do not forget that while we can not see it the gods have eyes."

So should it be with our work. The patient submits himself to our hands for our best work, trusting us to do the very best that is in us. Every piece of work we do has two influences, one upon the patient and one upon ourselves, and every time a man does a piece of work that is beneath his best he is lowering his ideal just that much; and every time he strives to perfect his work and make it a little better than what he did yesterday so far has he risen toward the perfection of his ideal.

I am glad that I live in the age of the new idea, the new thought in professional life. Perhaps I was unfortunate in the first professional

men I met in dentistry, for, as I can remember as a boy just going to college, it seemed to me it was the business of every dentist to have something disparaging to say about the other fellows, and such a thing as a consultation or the calling in of a specialist was never thought of. I am happy to live in the day when we have taken our stand, as we ought to have taken it years ago, beside the medical profession, who are not afraid of a consultation or to admit that there may be somebody else who knows more about a given piece of work than they do themselves, and I am glad to come in contact with that thought and idea, and I trust we may realize that we are not to be independent of each other but that it would be far better if we were interdependent, and would give to each other the very best we could, to be helpful not only to ourselves but to our fellow practitioners. (Applause.)

Dr. Luckey. I should like to bring out one more point. One thing that struck me that could be elaborated just a little bit was the beautiful story of the perfect rose on the cathedral at Milan. The ideal, the masterpiece of that artist, for six hundred years hidden away where nobody but the gods could see it. Do not put your ideal where only God will see it; that will not do you any good, posterity will not know it, and if they find it out they will not know who you are anyhow. But put your ideals where the whole world can see them so that they may be benefited thereby and you may receive some benefit too. It pays to advertise legitimately, ethically, properly, and if you have an ideal do not lose sight of it; do not let other people lose sight of it; do not put it where the beautiful rose was.

Dr. Power. I first wish to thank you for all the kind things you have said about my effort to entertain and please you to-night.

I consider it a great honor to appear before such an intelligent body of men. I want to thank the men who have taken part in the discussion and to say that they did have the right idea as to why I quoted ancient history. Those things were indisputable, and I take them as my foundation and I want you to take the application of the principles that were involved in those things.

In regard to the rose in Milan, Dr. Luckey said it could be elaborated on, which he did very finely, but perhaps we can bring it home a little closer. The treating of charity patients may be somewhat similar to the carving of that beautiful rose.

When I was at the hospital most of my patients were charity patients, the poorest people, coming from the slums of the city, and I always made it a rule to treat them exactly as I would the highest

paying patient. I think sometimes, I try to be a philosopher and to reason things so that they will be presented to me regardless of whether they go against me or not. I have seen much encouragement among those patients and I treat them believing that, if the Almighty has given me any skill to treat these conditions and diseases, I should treat even the poorest with all of the skill that has been bestowed upon me. By working upon those lines I accomplish my purpose and if the patient is grateful so much the better—I win both ways then. But if the patient be an ingrate I still have the pleasure of feeling, away down deep, that I did something to accomplish my duty.

I talked of art, music, and literature, and still say that I think literature is a very important matter for us to familiarize ourselves with. As Dr. Luckey says, we should follow the lives of the men whose names are written upon the roll of honor, and in order to follow these men, we should familiarize ourselves with their lives.

I know a surgeon whose name will doubtless be inscribed upon that roll and I am familiar with some parts of his life, and I know I do not care to reach that kind of success if I must travel through the channels along which he goes. I know of a case where he refused to operate because the patient was too poor to pay him. He holds a pair of scales with the life of the patient on one side and gold on the other, and if the gold is not put in heavily enough the scales will go down upon the other side. Now suppose a young professional man took that man as his beacon and did not familiarize himself with his life, then, unless he thinks for himself, he does not know what true success means. Let us take a more striking example, take for instance the life of Carlyle. I feel that no man should read Carlyle's writing, the great wisdom that is expressed with his words, until he has familiarized himself with Carlyle's life. I seems to me there was not a thing in his life that would not tend to make of him a pessimist, and still he was an optimist.

So we should familiarize ourselves with the lives of men. I realize that the men mentioned by Dr. Luckey were good men. Their names should be on the role of honor, and if we ever have a Hall of Fame of Dentistry, if the names of those men are not inscribed on tablets there, we shall have reason to believe that it is not the Hall of Fame of Dentistry.

One gentleman spoke about duty, about doing our work as though it was going to be examined by God himself. So it should be; every operation we perform in dentistry should be done as though the finest practitioner we know were going to examine it. Nor is that a remote possibility, it is quite a probability in view of the way patients move around.

About duty, Carlyle says, "Do the duty that lies nearest, the duty thou knowest to be duty, and the second duty will already have become clearer." There is the whole history of life in those two lines, and if a man had that alone impressed upon his memory it would lift him to success.

Some men say, where does art come in in dentistry? The greatest wonder the orthodontist has brought about in his profession has come from art. I never was taught the artistic value of the cusp of a tooth from the view-point of an orthodontist; and so, too, as to facial and dental harmony. I do not consider one can make a success as a dentist unless he be also a student of literature, art, and music.

It is only because I have the interest of the profession at heart that I dared to address you as I have to-night, and I know of no body of men I would rather appear before. Perhaps the greatest compliment I can pay to you is to say that I anticipated your view and it fell to my lot to give voice to your sentiments.

On motion, a vote of thanks was extended to Dr. Power for his most beautiful address.

On motion, adjourned.

November Meeting.

A regular meeting of the Central Dental Association of Northern New Jersey was held on November 18th. After some preliminary business the president welcomed the members of the medical profession present and invited them to participate in the discussion of the paper of the evening, which was read by Dr. H. J. Wallhauser and which was entitled "Syphilis of the Mouth."

Discussion of Dr. Wallhauser's Paper.

Dr. J. C. Corwin. I do not doubt that this disease has many very interesting features to you as dentists. You see the mouth so frequently that you must quite often run across cases of the disease. To you, I judge, it appeals, apart from its scientific interest, more from the point of view of prevention; you have to detect it so that you will avoid the possibility of conveying the disease from one to another, inasmuch as in your practice you necessarily must use instruments which have to be applied first to one and

then to another patient. Thus it becomes of the greatest importance to you to avoid all possibility of infecting either other patients or yourselves while handling these dangerous cases.

The disease is a most interesting one from a scientific standpoint. It is the one perhaps whose pathology we are best acquainted with; it has been studied with a great deal of care, and every year we learn more about it.

There was a time when syphilis and all other skin diseases were grouped together as skin diseases and cases of skin trouble were treated as cases of skin trouble, and that was all the attention that was given to them. Now, we not only distinguish between these diseases, but between a great many varieties of the same trouble and are able to diagnose them with very great exactitude, particularly when special attention is given to the subject, as has been done by our friend, Dr. Wallhauser. Syphilis has been described very frequently as a protean disease, that is to say, its manifestations are so various—the manifestations of the same lesions in different persons. It does not present itself always to the mind as being the same thing or anything like the same thing. It is very various indeed. Then, it has another characteristic, which tends to cause confusion in our minds if the subject is not very frequently presented to us. It is known, of all diseases, as being one which has the most imitatory character; it imitates nearly all other diseases involving the same tissues—the superficial tissues I speak of more particularly—so that we must devote a great deal of attention and study in order to make the fine and clearly marked diagnoses which have been described to you so well to-night.

Syphilis Not Confined to the Vicious.

It occurs in all classes of society. It will not do to say a man who presents a syphilitic lesion is necessarily a bad character, or has been brought up in a bad circle of associations, or anything like that, for the disease is found among all classes of society. Of course, it is acquired in most instances through physical contact and often through vicious associations, but that is not at all necessarily the case. More and more we find cases which occur entirely apart and separate from all such conditions, in which the disease has been innocently acquired, and we must appreciate the presence of this disease in a great many of our cases, even in the absence of all knowledge of the previous history, because sometimes it is impossible to make inquiries to obtain that knowledge and because in a great many instances there is no history which has any bearing whatever on the subject. The conveyance of syphilis is very subtle. It is not known by the subject, necessarily, when

he becomes infected. A great many people may be subjected to surroundings which will convey syphilis and escape entirely free, and we must suppose in a great many instances that depends on the natural immunity of their system, so that they can not acquire the disease. However, that is not true of the great majority of people, and when the poison of syphilis comes in contact with an open point on the surface of the system one is quite certain to acquire it.

The resisting power of different persons to the disease varies very greatly; in some the disease will run a part of its course without developing symptoms of such severity as to make them readily recognizable, while in others we see the most characteristic and severe lesions.

Syphilis Readily Transmitted.

There are a great many features, and I will not go into them except to dwell upon one perhaps which I have already alluded to, and that is the ease with which it may be transmitted by infecting the utensils, and it is of the greatest importance that we should emphasize the necessity in all surgical work, both dental and general, of handling these cases with instruments that are carefully sterilized both before and after using. I presume that there is no feature of dental work that renders it more liable to a feeling of uncertainty and distress, perhaps, on the part of those who have an intimate acquaintance with syphilis, than the possibility that when they are subject to a surgical operation, if due care is not used they may acquire this dreadful disease. So I will close my remarks by dwelling upon the necessity in all cases which you handle, whether there is any obvious disease in the mouth or not, of carefully sterilizing all instruments you have used in the buccal cavity. Only thus may you be sure of not transmitting that disease to your patients.

Dr. Edw. Ill.

I have been very much instructed by this extremely excellent paper and the illustrations. I have nothing to add except possibly to refer to the history of this disease.

Syphilis was brought into Europe by the Crusaders, as we read in some of the old books, especially the old German books, where they called the disease the "Frenchman," for the French Crusaders brought it into Germany and England.

I am glad that Dr. Corwin has spoken so well on the question of prevention and the carrying of the disease from one mouth to the other. I do not believe any one in the room has seen it so carried, at least I have no record of any such instance, for syphilis has become a very rare disease, though the general conditions are more frequent, because the same patient turns up again and again. But a patient with the

initial lesions is really a very rare one. I have seen but two in three years, and I have seen very many hundred cases every year in private practice and hospital work, so that the chances are not very great of the dentist running across it.

It struck me while listening to this very excellent paper how well it would be for doctors and dentists to come together now and then and exchange experiences. Take, for instance, the simple condition of stomach troubles—how many stomach troubles are due to faulty teeth and how many pailfulls of medicine the patients have to take which they could avoid if they would see the dentist instead of the doctor. Not only the stomach becomes out of order, but the intestinal track and the liver, and a great many times I have seen patients with pelvic diseases, which I could not explain from the local conditions, but found on looking at the teeth that it resulted from not chewing food well—all of which could be cured, not by myself, but by you gentlemen.

Dr. G. E. McLaughlin.

I have spent a most profitable and pleasant evening with you to-night. First, through Dr. Hane's hospitality, whose guest I am, the inner man has been amply regaled. Second, through Dr. Wallhauser's brilliant paper a most pleasant condiment has been added toward the mental side of the feast.

Being a laboratory man I should have enjoyed hearing the doctor discuss more fully his findings with regard to the *spirochetae pallida,* the now generally recognized infective organism of syphilis.

Speaking of the *spirochetae pallida* reminds me of a mouth affection in which another member of the *spirochetae* family (not the *pallida*) together with a fusiform bacillus is found, which closely simulates syphilis. I refer to Vincent's angina, a throat or mouth affection, which may appear on the tonsils, the pharynx, the borders of the gums, the lips, or the tongue. It was first described by Vincent in 1896, and since then by numerous others, among whom Salomon in 1901, in the happy manner of word-building so potent and so beautiful in the German language, calls it *spirochatenbazillenangina.*

The symptoms present are of the mildest kind, and as a rule a lesion markedly chancriform in appearance, frequently situated on the center of the tonsil, has existed for some time without being noticed. The deposit is white, or opalescent, soft on top, readily detachable, and leaves an excavated and bloody surface. The duration of this affection seems to be from eight days to four or six weeks.

Of great importance is the question of diagnosis, as diphtheria and syphilis must be differentiated. It is here that the laboratory can be

of service to us. Cultures of blood serum as well as scrapings on a glass slide should be taken from the lesion and sent to the bacteriologist for a report.

Dr. Wallhauser. I have really thought of nothing to add to what has been said, and I want to thank you all for your kind discussion of my paper.

On motion a vote of thanks was tendered to Dr. Wallhauser for his very excellent paper.

On motion the meeting adjourned.

New Jersey State Dental Society.

Friday, July 19, 1907.

President Brinkman called the meeting to order.

The president announced that the paper of B. Holly Smith had been received by the secretary.

On motion Dr. Smith's paper was read by title.

On motion a unanimous vote of thanks was extended to Dr. Smith.

On motion the president appointed the following committee to audit the treasurer's accounts: Drs. Halsey, Jaquette and Irwin.

On motion of Dr. Meeker, by the affirmative vote of all present, it was resolved that the report of the executive committee regarding the disposition of Dr. Levy's library be concurred in and that the papers and books of the late Dr. Levy be presented to the Southern Dental Society.

Report of Clinic Committee.

Dr. Dilts of the Clinic Committee reported that some thirty clinicians were present at the clinics; that the electric storm delayed operations somewhat, the current being off for an hour and a half, but that during that time those present took advantage of the opportunity to thoroughly examine the operations of those who did not use electricity, and that later on when the electric current was resumed the other clinics were very well attended.

Dr. Dilts recommended, from the committee, that the Executive Committee secure four new Brinkman chairs, also attend to the repairs of two chairs, and that they secure two second-hand foot engines, all for the next meeting.

Dr. Dilts congratulated the society upon the presence of Dr. Taggart, not only to read a paper, but to give a clinic, and said that he believed the present meeting would be a landmark in the history of the society because of these events.

On motion report accepted.

On motion of Dr. Meeker it was resolved that it is the sense of the Society that the recommendations of the Clinic Committee be adopted by the Executive Committee.

On motion a vote of thanks was extended to the various clinicians.

Dr. William H. Gelston presented the report of the Materia Medica Committee.

Report of Materia Medica Committee.

This committee would beg to submit for your consideration the following report on the new medicaments coming under our observation during the past year:

Listerine Tooth Powder. Composed of precipitated carbonate of calcium, carbonate of magnesium, oil of cananga, and the antiseptic constituents of Listerine, making a very pleasant dentifrice.

Euthymol. Two new forms have been added to the euthymol group. This group is too well known to need any further comment, except to mention the ingredients contained therein: Oil eucalyptus, thymol, boric acid, wintergreen oil, menthol and wild indigo.

Oleoseptine. Oleoseptine is a colorless, clear antiseptic, germicidal and alkaline. Maintains a normal alkalinity in the mouth, and is useful both as a mouth wash and disinfectant for instruments.

Antidystrophine. Antidystrophine (Elixir of Drimys Comp.) has the property of increasing the percentage of hemoglobin in red corpuscles, augments the oxygen carrying power of the blood, stimulates the appetite, aids digestion, and is useful in the systemic treatment of pyorrhea alveolaris.

Metakalin. Metakalin is a solid cresol soap, consisting of a mixture of 80 parts of a new solid double compound of three molecules of metacresol, one molecule of potassium metacresol and 20 parts of hard soap. The preparation contains accordingly 73.5 per cent. metacresol, which imparts to it a high disinfecting value. A one to two per cent. solution suffices for disinfection of hands and instruments.

Perhydrol. Perhydrol (30 per cent. hydrogen peroxide, Merck, 30 per cent. by weight, 100 per cent. by volume) claimed to be "acid free"; this, however, does not imply that it does not give an acid reaction with litmus paper, since peroxide of hydrogen is itself endowed with acid properties. The term is taken to signify that the preparation is free from all traces of organic or inorganic acids.

Codrenin. Cocain in one per cent. solution with adrenalin 1-5000. Each fluid ounce contains:

Cocain hydrochlorid	4 3-5 gr.
Adrenalin chlorid	1-12 gr.
Chloretone	2 1-4 gr.

A local anesthetic and styptic with reduction of danger of toxic effect when injected into the gums or subcutaneous tissues, it immediately renders the part almost bloodless, practically suspending the circulation of that part, thus preventing the immediate absorption into the blood of the cocain.

Iodalbin. An iodoproteid compound, containing 21.5 per cent. of iodin. The iodin is held in chemical combination, as proved by the fact that it does not react to the usual test agents until after the compound is broken down and decomposed. Is a reddish colored powder, insoluble in alcohol, water, acids and other ordinary solvents, but soluble in alkaline solution; administered for the same purpose as potassium or sodium iodid.

Senoforme. Senoforme is a French product (Diiodosalycilic acid methylester) employed as an antiseptic the same as iodoform.

Germicidal Discs. Each disc contains mercuric iodin 3-8 gr. and sodium bicarbonate 16 gr. It is claimed the peculiar value of these discs is due to the fact that upon going into solution the alkali which they contain increases the actual germ killing power of the mercury salt. The increased germicidal power of this combination is due to the fact that it prevents coagulation of albuminous bodies by the mercury salt. One disc dissolved in four ounces of water forms a 1-5000 solution of mercuric iodin, equal or superior in germicidal activity to a 1-1000 solution of corrosive sublimate, and in this combination eliminates the corrosive action of mercury on nickel or steel instruments.

Formidine. (Methylen disalicylic acid iodin.) An odorless substitute for iodoform. A condensation product of iodin, formic aldehyde and salicylic acid. Is a reddish yellow powder, tasteless and having a slight odor suggestive of

iodin, containing 47 per cent. of the same. For external administration it should replace iodoform, to which it is in every way superior.

The report was accepted with the thanks of the society.

Report of Essay Committee.

The Essay Committee, as the program shows, has secured for presentation to the New Jersey State Dental Society at its 37th Annual Meeting papers of originality of thought and of vital interest. Just before the program went to print one of our essayists who had agreed to appear was compelled to withdraw his name because of ill health, and at the last minute a telegram was received from Dr. B. Holly Smith which stated Dr. Smith's inability to appear because of the condition of his son, following a serious surgical operation.

Report of the State Board of Registration and Examination in Dentistry.

In accordance with the provisions of an Act regulating the practice of dentistry in New Jersey, we submit the following report:

We have every reason to feel pride in the New Jersey Examining Board and the State Dental law, as we receive many letters from other state boards requesting our rules and laws that they may follow in our ways, thus proving the high regard in which we are held.

In the matter of interchange of license we have not had as many states sign the Asheville Resolution agreement as we could hope to report, as many state boards are opposed to it. Of the states we now have interchange agreements with, only one state has furnished us any applicants, and that one sent two, who qualified according to the Asheville Resolution. Some states have incorporated in their new laws a clause similar to the Asheville Resolution, but which does not embody as much in the way of requirements.

At the annual meeting of the State Society held in Asbury Park in July, 1906, Dr. W. E. Truex, of Freehold, was recommended to the Governor for appointment on the board to succeed himself, and at the December meeting Dr. Truex presented his commission from the Governor and was welcomed again as a member.

At the annual meeting held in Trenton, December 9th, 10th and 11th, Dr. B. F. Luckey was re-elected president of the body, and Dr. Charles A. Meeker was again elected to the office of secretary and treasurer. At this meeting there were fifteen applicants cited to appear, of which eleven took the examination, four being absent on account of illness. Out of the

eleven examined, seven were successful and were granted licenses to practice dentistry in the state; the other four were conditioned and appeared at the July examination. At the July examination there were sixty-five cited to appear, and of this number sixty-two were examined. We are unable, on account of the large class examined, to say how many were successful; this being the largest to come before the board in its history.

Equipment for Examination.

New Jersey is at the present time far ahead of other states in its equipment and facilities for the examination of graduates. The state furnishes and owns twelve complete portable work benches for prosthetic work. It owns and operates eighteen chairs with table accessories, and twelve complete foot engines, so that by systematic management thirty dentists can be at work at once in operative and prosthetic dentistry.

Two of the examiners, and Dr. Duffield, of Camden, appeared before the State House Commission at different times and, through the liberality of the state, obtained these concessions, for which the members of the board and the profession in the state feel very grateful.

During October and November of 1906 the secretary and assistant, after two months of painstaking and arduous work, succeeded in accomplishing what no other examining board in the country ever has, viz., giving a complete list of every license issued by the State Board, the number of the license, and the name of the dentist to whom it was issued, and, as far as the records could be searched, a record of those deceased. This was done to prevent traffic in the sale of licenses of those who had entered into another line of business or had died. For the past two years every applicant has been obliged to deposit a photograph of himself in conjunction with his application, and we learn with pleasure that other states have begun to follow our example. Several cases of substitution have been practiced successfully in other states, but up to the present time none has been tried in New Jersey.

Registration of Dentists.

In the registration of dentists it has been our aim to obtain a correct list, but it really seems to be one of the impossibilities. Last October we sent out 1,000 blanks and only received in return about one-half. The board again desires to say that if the dentists desire to see their names printed in the annual list it will be necessary, on receipt of the registration blank sent out by the secretary on October 1st, to remail the same immediately to the secretary properly filled out. This list of names, together with the report of the board, is placed in the hands of the Governor on the first day of December. Registration blanks

sent in after that date are of course placed on the book of registry for general inspection, but not printed. Complaints have been made to the secretary of omissions in the printed list of the report to the Governor sent out each year. If such complainants had promptly mailed the blanks properly filled out, their names would have appeared.

We are constantly receiving mail saying some dentist is practicing illegally, and upon investigation we find it to be some one who possesses a license, but has moved from the last address given in the annual report to the Governor, and failed to report his removal to the secretary. Hardly a week passes but the assistant has to investigate complaints against dental parlors practicing without registered operators. These comply with the law by employing a registered man, whom they keep two or three weeks and then discharge. Of course this results in another complaint. During the year New Brunswick, Paterson, Passaic, Hoboken, Jersey City, Newark and Elizabeth have been visited and a canvass of the parlors been made. Our efforts are ceaseless in trying to enforce the law, and we are glad to say each year shows fewer violations.

Many of the county prosecutors of the state who are appointed by this society, while accepting the position, do not even take the trouble to answer the secretary's request for a report.

Following is a report of the counties:

Atlantic	Dr. E. M. Packard,	Prosecutor	No report
Bergen	C. W. Heyden, Jr.	"	No infractions
Burlington and Cape May	Dr. S. F. Haines	"	No report
Camden	Dr. J. E. Duffield,	"	No infractions
Cumberland	Dr. S. C. Slade,	"	No infractions
Essex	Dr. W. P. Richards,	"	No infractions
Gloucester	Dr. J. G. Halsey,	"	No infractions
Hudson	Dr. C. W. F. Hane	"	No report
Hunterdon	Dr. W. W. Hawke,	"	No report
Mercer	Dr. C. H. Dilts,	"	One infraction
Middlesex	Dr. Harvey Iredell,	"	One infraction
Monmouth	Dr. S. C. Scobey,	"	No report
Morris	Dr. S. B. Johnson,	"	No report
Ocean	Dr. A. S. Bailey,	"	No report
Passaic	Dr. W. H. Pruden,	"	No report
Salem	Dr. W. A. Jaquette,	"	No infractions
Somerset	Dr. C. M. Henry,	"	No report
Sussex	Dr. J. D. Haggerty,	"	No report
Union	Dr. Walter Woolsey,	"	No report

On May 24th a letter was written to each prosecutor of the counties named, earnestly requesting a report of any infractions of the dental law, and the above is the result.

Our State is well represented in the National Association of Dental Examiners, two of our members holding responsible offices therein, which places New Jersey in an advanced position before the country. Dr. Chas. A. Meeker has been the secretary and treasurer for the past thirteen years, and Dr. A. Irwin is chairman of the Tabulation Committee.

The results of the work of the Tabulation Committee for 1907 is as follows:

Tabulation of Dental Examinations.

The tabulation of the result of the examinations held by the boards of dental examiners throughout the United States classifies the graduates of fifty-six dental colleges with mathematical exactness. The status of each dental college graduate examined is ascertained. The completed work will afford invaluable record for reference in regard to the efficiency of dentists who apply for licenses to practice dentistry and are actually examined by dental examiners of the various state boards.

Illustration:

Chicago College of Dental Surgery, of Chicago, Illinois: Number of graduates examined during the last three years, 248; passed, 183; failed, 65; the percentage of college graduates who passed their examinations, 73. Boards of examiners before whom these graduates appeared: California, Idaho, Illinois, Indiana, Iowa, Massachusetts, Michigan, Minnesota, Missouri, North Dakota, Ohio, Virginia, West Virginia, Wisconsin.

The averages of each one of these graduates is tabulated in each department of dentistry, namely: practical dentistry, including filling teeth and making plate; also, oral or written examinations, including such subjects as chemistry, metallurgy, oral surgery, dental and oral pathology, therapeutics, materia medica, operative dentistry, orthodontia, prosthetic dentistry, crown and bridge work, anesthesia and bacteriology.

The results of 4,308 examinations were tabulated up to October, 1906. 3,114 applicants passed successful examinations; 1,194 applicants failed. The percentage of dentists who were successful in passing their state board is 72, thus publishing the verdict that 28 per cent. of the college graduates were unfit to practice dentistry.

The report of the secretary of the New Jersey Board of Registration and Examination in Dentistry forms an important part of the work of tabulation which covers the United States and Canada. Prominent dentists conversant with the tabulation have endorsed it heartily as a work of national value.

Dental Legislation. During the early part of the session of the last Legislature the board held a conference in Newark with the chairman of the Legislative Committee of the New Jersey State Dental Society, and between them was formulated the following amendments to the dental law of the State:

First—Section 3, changing the preliminary educational requirement from common school to four-year high school certificate.

Second—"The Five-year Clause" to be stricken out of section 3, eliminating the following words: "Or shall present the written recommendation of at least five licensed dentists of this state of five years' standing," etc.

These amendments were delivered to the chairman of the Legislative Committee of the State Society with a request from the board that the Committee use every effort to secure their passage by the Legislature. They were accepted by him with that understanding, but instead of such effort being made, it was learned later by the board that the amendments had been laid aside, and with the aid of a Trenton lawyer, an entirely new bill had been drawn. This bill removed from the board practically all power over its conduct and proceedings, and placed it in the hands of politicians holding State offices, who know nothing of the needs or requirements of dental education, and would never have occasion to officially meet the candidates for licenses. While provision was made for the appointment of two dentists on this dental council, only one would be in a position to act with expert knowledge—the secretary of the Board of Examiners—the other, the president of the State Dental Society, by reason of the fact that he held office only one year, would not have opportunity to familiarize himself with the work, so would be but little better qualified to act than the lay members of the council. There were many other features of the bill that were so totally at variance with our present law, and that seemed so unnecessary and unwise, that it was condemned by every member of the board, by the president of the State Dental Society, and by every member of the society approached on the subject, with the exception of six or seven members of the legislative committee who were responsible for its creation. Of this committee, consisting of some 18 members, about one-third took part in the framing of the bill, the rest knowing nothing of what was being done, subsequently these, when informed of the action of the other members, expressed strong disapproval and determined objection to the bill. The argument of the committee was that the bill would elevate dentistry in New Jersey to a higher plane; also that it was similar to one passed by the Pennsylvania Legislature last May: reasons that seem open to strong objection and criticism. New Jersey has on its statute books one of the very best dental laws in this

country, and, with the few amendments suggested, it would be as near perfect as we could hope at this time to make it.

The record of the board of examiners has been endorsed year after year by the State Dental Society, and is open to the inspection of any and every person who is interested. The members are selected by an incorporated body of their peers and are familiar with the details of the work, and they protest against any effort to make it subsidiary to any other board or council, either professional or lay. If you do not like or can not trust the members of the board as now constituted, replace them by better men, but do not ask the dentists of New Jersey to place the keeping of their interests in the hands of professional politicians, who know nothing of dental needs and care less.

Permanent Quarters.

In consequence of the great growth of dentistry in this country, and the feeling that as time passes the appearance before the New Jersey Board of men desiring license to practice in this State will be greater year by year, we feel that permanent quarters in the State House should be assigned us, that we may be sure of always having proper and adequate facilities for conducting our examinations, in keeping with the dignity of our profession and the credit of our State.

Financial Report.

December 1st, 1905, to November 19th, 1906.

December 1st, 1905, balance	$1,023.27
Receipts from applications and interest on bank balances	1,431.36
	$2,454.63
Disbursements	2,097.44
Balance	$357.19

Bills payable and estimated expenses will equal or exceed the above balance.

B. F. Luckey, D.D.S.,
President.
Charles A. Meeker, D.D.S.,
Secretary and Treasurer.
William E. Truex, D.D.S.
Alphonso Irwin, D.D.S.
Herbert S. Sutphen, D.D.S.

Audited and found correct by—
F. H. Scott, Secretary,
N. J. Auditing Co.

It was moved, seconded and carried that the above report be received and placed on file.

On motion the president was authorized to appoint a committee of three on oral hygiene to act in conjunction with the National Association.

The president then called upon the Legislative Committee for its report.

Dr. Duffield. We report progress. Your legislative committee had various meetings throughout the winter at which time the question of drafting and submitting either a new dental bill or amendments to the old one was submitted. You have all seen the report of the State Board of Dental Examiners in which there is a clause setting forth the work and position of the Legislative Committee. It is quite true in most of its statements. However, there is one clause in that report which, as chairman of the Legislative Committee, I respectfully request the State Board of Dental Examiners to correct, and that is this (reading from report of State Board): "Of this committee, consisting of some eighteen members, about one-third took part in framing the bill, the rest knowing nothing of what was being done. Subsequently these, when informed of the action of the other members, expressed strong disapproval and determined objection to the bill." I would like to say in that connection, so that the members of this society may understand the position of the Legislative Committee, that really that is an injustice to the members of the committee, and particularly so to the chairman. The procedure of the Legislative Committee has always been to send notices of every meeting to every member and we always had a quorum present when any business was transacted, our average attendance being from eight to eleven, and the minutes of every meeting have been approved at the subsequent meeting. My understanding of parliamentary law is that the action of a quorum of a committee is binding upon the committee as a whole, and especially so if the minutes of that meeting are approved by a subsequent meeting.

I feel that should be rectified in the report of the State Board.

Again, we discovered, after devoting a great deal of time to this work, that the status of the Legislative Committee was nothing, it was nil, and insofar as our constitution and by-laws are concerned no Legislative Committee is provided for, nor are the duties of that committee anywhere defined. Therefore it is the desire of your Legislative Committee that an amendment be made to the constitution and by-laws creating a Legislative Committee, if the members of this society think that such a committee is desirable in connection with the work of this society, and furthermore that the duties of this committee be clearly defined.

On motion the above report was received and placed on file.

It was moved by Dr. Meeker that a committee of two men, members of this society, be appointed to define the duties of the Legislative Committee.

Dr. Iredell moved to amend by making the committee consist of three instead of two.

Dr. Meeker accepted the amendment.

The original motion and amendment were both seconded.

Dr. Duffield and Dr. Luckey each expressed the opinion that there was no provision in the by-laws for the appointment of a Legislative Committee and suggested that a resolution be introduced for the amendment of the constitution so as to create a Legislative Committee.

Dr. Luckey suggested that in the meantime the Legislative Committee, as now constituted, proceed as it has heretofore done, and that if necessary instructions could be given to this committee at this meeting.

The motion of Dr. Meeker as amended by Dr. Iredell being put to vote was unanimously adopted.

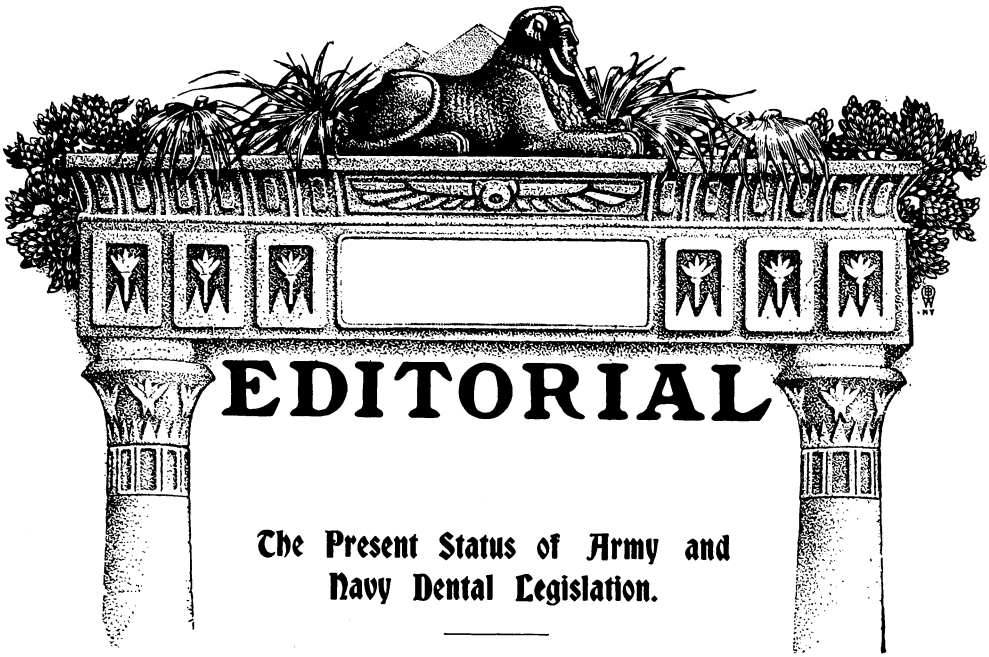
Subsequently the president appointed the following committee under this resolution:

Drs. Duffield, Holbrook and Baker.

Dr. Meeker gave notice of an amendment to article 5 of the by-laws so as to provide that licensees of our examining board who join the society within one year from the time of receiving their license papers shall not be required to pay an initiation fee.

On motion adjourned.





EDITORIAL

The Present Status of Army and Navy Dental Legislation.

The distinguished editor of the *Dental Cosmos* is a brilliant writer of English. The editor of ITEMS OF INTEREST has, till now, flattered himself that he could comprehend the meaning of good English. The editorial in the *Cosmos* for January, however, is couched in language which the editor of this magazine is compelled to admit is beyond his mental grasp.

Dr. Kirk tells us that Army and Navy Dental legislation is suffering from an illness which he diagnoses as "selfishness," *i.e.*, "a tendency to make the interest of the individual take precedence over the interest of the family, the clan, the community, the race." Who has injected this element of selfishness into the effort to obtain an Army Dental Corps?

Does Dr. Kirk mean that selfishness has prompted those that have declared that it were better to have no legislation than to accept a bill which omits from the corps the names of Marshall and Oliver? Or does he mean that selfishness has prompted the present members of the alleged Legislative Committee to take the stand that it were better to have no legislation rather than to accept any bill not drawn by them-

selves? The present writer has admitted his inability to discern the true meaning of the *Cosmos* editorial, but he is prepared to discuss both of the above propositions.

Why We Need Marshall and Oliver.

Dr. Kirk tells us that "the good of the service . . . is being in one way or another subordinated to political and personal interests that have their fount and origin in some one's claim to personal preferment, or to some one's demand for preferment for his friend." And continuing, he tells us that "the humanitarian interests are being ignored and sacrificed." But are they?

One reading of the above quotation, and more than one may be found, is, in plainer English, that those who advocate and insist upon the appointment of Marshall and Oliver, are actuated more by their determination to see these men in high places than by any interest they might have in the welfare of the common soldier. But this is simply not true.

The alleged barrier in the way of commissions for Marshall and Oliver is that terrible bugaboo, the "age limit," but attention may be called to the fact that *those that so zealously keep a finger pointed at that barrier, have made no intelligent effort to remove that barrier from the paths of these particular men.*

The Age Limit.

What is meant by "the age limit"? Service in all departments of the army is limited, and men who attain to the age of retirement give up active service, and receive pensions in accordance with their rank at the time of retirement. Manifestly, therefore, the government must protect its treasury by setting up an age limit also for those that enter service, as otherwise many might draw handsome pensions after very brief service. Any one who even discusses army legislation with either senators or congressmen is met with this argument, which is used as a reason for injecting the age limit into any dental bill that might be proposed. Yet there is a logical answer, which a prominent member of one of the Military Committees admitted to the present writer had never been presented to his Committee, by our alleged representatives in Washington. It is as follows:

If Congress passes a bill creating a Dental Corps, presumably it is

desirable that said Dental Corps should be efficient, and that it should become efficient as quickly as possible. Will the experienced members of the dental profession admit that the best interests of our soldiers will or can be conserved with a Dental Corps which shall include no one over thirty years of age?

It is quite proper to limit the age for admission into every existing department of the army, because every department has long been established and already is commanded by officers who have both age and experience; experience not only in their specialties, but likewise army experience. This will not be true of any Dental Corps which may be organized with the usual age limit as one of the provisions. It is, therefore, but a logical deduction that the newly created corps should be recruited as far as possible from the existing Contract Dental Corps, not because of any friendship we might have for the Contract Dentist, but because we thus safeguard the interests of the enlisted soldier.

In similar line of reasoning we cannot escape the corrollary that Marshall and Oliver should have the highest positions in the officered corps, not because we are friendly to Marshall and Oliver, but because the success of the new corps, and the honor which it should bring to dentistry, will be largely enhanced by the appointments of these men, who have already won the esteem of all the army men with whom they have come into contact. It is also pre-eminently advisable that they be made officers in the Dental Corps when organized because, not only are they good dentists, but they both are fine surgeons. Yet, strangely enough, certain men in our midst secretly oppose them on that very ground, viz.: their medical knowledge. And this is the more odd since this dental corps is to be attached to the medical department. Almost any citizen, not a dentist, and therefore not blinded by dental prejudice, would see at once that the very best dental corps imaginable would be one composed of men holding both the medical and the dental degrees.

In view of all these facts, and they are facts, how can there be any selfishness in advocating the appointment of Marshall and Oliver, the two men best fitted for the positions; the only two men in the United States possessing the requisite dental knowledge, the requisite medical and surgical knowledge, and a knowledge of the needs of the soldier?

EDITORIAL

The Legislative Committee.

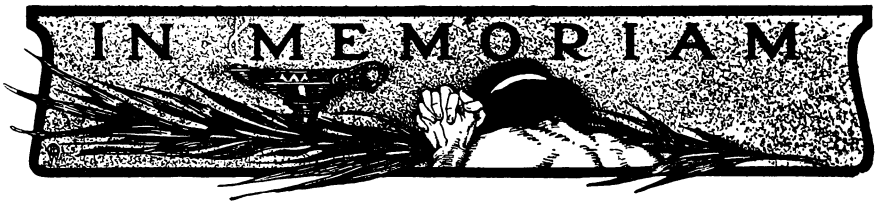
There are several gentlemen who call themselves the Legislative Committee of the National Dental Association. Whether they are or are not representting the National body is a question that may for the present be left for future discussion by the association. It would matter nothing what they are, nor who they are, if, as citizens, they might succeed in having a proper bill passed, and it would be folly and disloyalty to the corps to place technical obstacles in their path, provided they were laboring rightly for the right cause. But what are they doing?

Senator Bulkeley has been persuaded to introduce, as an amendment to the medical bill, exactly the bill which failed at the last Congress. This old bill, be it remembered, passed the Senate with certain amendments, and later was recommended by the House Military Committee, with other amendments. Nevertheless the work of both Military Committees has been ignored, and the same old bill put forward. A part of this bill, Section 4, provides that a board of three examiners may be appointed by the Surgeon General, two to be civilians, whose qualifications must be certified by the Council of the National Dental Association.

There are seven members of the council; consequently four members, working in harmony, make a majority and control the acts of the Council; thus the prestige of army dental appointments would, by such a measure, be placed in the control of four civilians.

The present Legislative Committee was appointed at a meeting of the Council at which only four members were present. This committee has promptly introduced an old measure which gives added powers to the Council of the National Dental Association, and they have done this despite the fact that this Section 4 was stricken from the bill before it could pass the Senate at the last Congress, and despite the fact that at a conference in Washington between the Council and a number of members prominently interested in army legislation, the Legislative Committee was specifically instructed to abandon this scheme and to work for the passage of the bill as it had passed the Senate.

Is this the selfishness to which the editor of the *Cosmos* vaguely alludes?



Resolutions on the Death of Dr. W. D. Miller.

To the members of the Southern California Dental Association and the Los Angeles Association of Dental Alumni the news of the death of Dr. W. D. Miller came as a most sorrowful surprise. We had come to love and respect Dr. Miller profoundly, for his noble personal character, and for his faithful labors on behalf of scientific dentistry; and in view of his past great usefulness we were expecting even greater results from his work in the future. We were rejoicing that while his life abroad had been crowned with honors never before achieved by a member of our profession, he had returned to his and our own land to be more intimately associated with us in educational work and genial fellowship; and it seems especially sad that his life should be cut off when he had barely set foot upon his native soil. And yet we have a feeling of gladness that, death being inevitable, he should have looked his last upon the familiar scenes of his childhood, and be buried in the quiet cemetery of his forefathers.

Dr. Miller died at the zenith of his powers; his fame is secure; his life record will remain unshadowed forever, constituting one of the brightest pages in the history of dentistry.

The life of such a man as Dr. Miller is a landmark in scientific progress. Within a century's time there are but few. Dr. Miller's name takes rank with those of Pasteur, Lister, Virchow and Schwann, as that of a sincere original investigator, who has brought truth to light for the benefit of all the world.

At our last annual meeting we directed that a letter be sent to him congratulating him on his return to America to take up the work in Michigan University and ourselves in having his presence in this country for a stimulus to scientific work. In response we received a very appreciative letter from him.



To his wife and children we, the members of this association, desire to express our deepest sympathy and kindest regards.

J. D. Moody,
Garrett Newkirk,
E. L. Townsend,
Committee.

Henry C. Boenning, M.D.

At a regular meeting of the Southern Dental Society of the State of New Jersey the following resolutions were adopted:

Whereas, In His infinite wisdom, it has pleased our Heavenly Father to call from the scenes of his activities our honored member and teacher, Dr. Henry C. Boenning,

Be It Resolved, That it is the sense of the Southern Dental Society of the State of New Jersey, that by the death of Dr. H. C. Boenning it has met with an irreparable loss; because he was ever ready to give from his great storehouse of knowledge, scientific counsel and professional instruction, in such a way as to leave an indelible impression upon the minds of all coming under the spell of his magnetic personality and eloquence. As the successor of Dr. James E. Garretson, he achieved distinction and added new laurels to the fame of the Oral Surgeon. None can say that the mantle of Garretson could fall upon the shoulders of a nobler man. The verdict of the Profession will be that Dr. H. C. Boenning was one of the great chiefs of Oral Surgery. This Society mourns his loss and feels keenly his departure. He sacrificed his life in treading the path of duty, and well may we say of him in the lines of Tennyson:

While the races of mankind endure
Let his great example stand;
Colossal, seen of every land,
And make the soldier firm,
The statesman pure,
Till in all lands, and through all human story,
The path of duty be the way to glory.
And in the great Cathedral leave him,
God accept him, Christ receive him.

Be It Resolved, That the members of the Southern Dental Society of New Jersey take this means of expressing to his family our profound sorrow and deep sympathy for them in their affliction.

Be It Further Resolved, That these resolutions be sent to the family of our departed Honorary Member, spread upon the minutes of our Society, and copies forwarded to the Dental Journals for publication.

CROMWELL IRONSIDES, D.D.S.
J. G. HALSEY, D.D.S.
WM. A. JAQUETTE, D.D.S.

Joseph Fournier.

After an illness of typhoid fever, lasting about three weeks, Dr. Joseph Fournier died at his home, 66 East 58th Street, New York City, on December 25th, 1907.

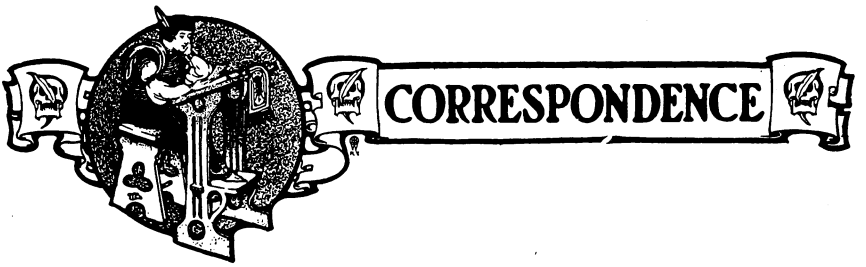
Dr. Fournier was born in St. Gabriel, P. Q., Canada, November 18, 1859, the son of Joseph and Priscille (Langlois dit La Chapelle) Fournier. He came to New York City with his parents when seven years of age. He studied dentistry for one year at the New York College of Dentistry, and was graduated from the University of Maryland, Baltimore, in 1885 with high honors in all departments. He was associated for a time with Dr. Böedecker, at 60 East 58th Street, and a number of years had charge of the dental clinic of the New York Dispensary.

On November 18th, 1885, he married Miss Celina Rousseau, daughter of David and Ahny F. Rousseau.

He was a member of the First District Dental Society, the Royal Arcanum, and the Indian Harbor Yacht Club.

He was well known in his chosen profession as a very skillful operator, and his painstaking thoroughness in every detail of his work gained for him an enviable position in the esteem and regard of all his patients. His charming personality and lovable nature endeared him strongly in the hearts of all of his friends, and those who knew him best will miss him most.

Left to mourn their loss are a wife, a father and mother, one brother, Dr. George A. Fournier, and a sister, Mrs. L. C. Rivard, of Montreal, Canada.



Editor ITEMS OF INTEREST.

Dear Sir—I wish to thank you for your editorial in last issue of ITEMS calling attention to the article of Dr. J. Leon Williams on "Scientific Forms of Artificial Teeth." I also wish to say that I fully endorse the views expressed in that article.

I notice in the January issue of ITEMS an article by F. E. Buck, claiming for Dr. G. F. Lampkin, of Jacksonville, Fla., the credit of first using gold inlays in his practice about twenty years ago. I know that Dr. W. V-B. Ames, of Chicago, was making and using gold inlays in 1892, and as it was not a very new thing with him then, I think it very probable that he made his first one more than twenty years ago.

Fraternally yours,

H. H. WILSON.

Phoenix, Arizona.



SOCIETY ANNOUNCEMENTS

National Society Meetings.

American Dental Society of Europe, London, England, beginning July 31, 1908.

National Association of Dental Examiners and the National Association of Dental Faculties, Back Bay, Boston, Mass., July 24, 25, 27, 1908.

Society Meetings.

G. V. Black Dental Clinic, St. Paul, Minn., Feb. 27, 28, 1908.

Connecticut State Dental Association, Bridgeport, Conn., April 21, 22, 1908.

Odontotechnique Society of New Jersey, Newark, N. J., Feb. 6, 1908.

Southwestern Michigan Dental Society, Jackson, Mich., April 14, 15, 1908.

Connecticut State Dental Association.

The forty-fourth annual convention of the Connecticut State Dental Association will be held at Bridgeport, April 21 and 22, 1908. An excellent meeting is assured.

E. S. ROSENBLUTH,
Secretary.

1051 Main St., Bridgeport, Conn.

New Dental Society.

The Plainfield Dental Association was formed through the instrumentality of Drs. Charles A. Meeker and C. W. F. Holbrook, both of Newark. Dr. Meeker is the treasurer of the Central Dental Association, and Dr. Holbrook is a member of that flourishing organization.

The local dentists who have become incorporators of the Plainfield body are:

Frank W. French, Frank P. Clawson, Charles G. Davis, Clive M. Montfort, Charles L. Moore, John R. Westervelt, David O. Atwood, B. S. Leonard, C. W. Leonard, Guy H. Hillman, George T. Moore, Raymond S. Stevens, Otis B. Whitford, Frank S. Wells and William E. Stelle.

Dr. A. W. Harlan, of New York City, will read the first paper before the new society, on a date to be selected.

Clinic of the G. V. Black Dental Club of St. Paul, Minn.

Everything is being done to make the annual midwinter meeting of this club, which will be held on February 27, 28, 1908, as interesting as possible.

Many of the members of the club will make gold foil fillings, while other members will make demonstrations with gold, showing various methods of casting tips and backings for teeth as well as inlays.

Dr. W. N. Murray will, upon both days, demonstrate the use of Dr. Taggart's casting machine.

Dr. J. O. Wells will demonstrate methods for casting Richmond crowns.

Dr. C. E. Woodbury, of Council Bluffs, Iowa, an authority on inlays, will also demonstrate and read an essay on the value of using inlays.

Such well known operators as Drs. Searl, F. S. James, Wallace, Fawcett, Yerke, Gallagher, Conzett, Carlson, Moyer, W. D. James, Crandall, C. H. Robinson, Lewis, F. S. Robinson, and others will make operations.

The essays, as in the past, will be one of the features of the meeting.

Everybody interested in the advance and progress of the dental profession is invited to meet with us and assist in making our coming clinic the best ever held.

Program of the G. V. Black Dental Club of St. Paul.

The Annual Clinic will be held in St. Paul on Thursday and Friday, February 27th and 28th, 1908, at the Old Capitol Building. Thursday, February 27th, 10 A. M.—1, Dr, A. C. Searl, Gold Filling; 2, Dr. F. S. James, Gold Filling; 3, Dr. J. W. S. Gallagher, Gold Filling; 4, Dr. W. D. James, Gold Filling; 5, Dr. K. E. Carlson, Gold Filling; 6, Dr. W. R. Clack, Gold Filling; 7, Dr. J. V. Conzett, Gold Filling; 8, Dr. W. H. K. Moyer, Gold Filling; 9, Dr. W. N. Murray, Cast Gold Inlay; 10, Dr. G. N. Beemer, Cast Gold Inlay; 11, Dr. J. O. Wells, Cast Gold Inlay; 12, Dr. F. S. Robinson, Amalgam Filling.

Table Clinics—The list is not completed.

2 P. M.—Essay: "Western Dental Philosophy," Dr. E. S. Barnes, Seattle, Wash. Essay: "A Consideration of Western Dental Philosophy by an Eastern Man," Dr. Chas. McManus, Hartford, Conn.

8:15 P. M.—Illustrated Lecture: "Pathology of Dental Caries."

Friday, February 28th, 1908, 9 A. M.—1, Dr. Wm. Finn, Gold Filling; 2, Dr. W. G. Crandall, Gold Filling; 3, Dr. F. J. Yerke, Gold Filling; 4, Dr. A. M. Lewis, Gold Filling; 5, Dr. F. S. James, Gold Filling; 6, Dr. J. W. S. Gallagher, Gold Filling; 7, Dr. J. F. Wallace, Gold Filling; 8, Dr. C. H. Robinson, Gold Filling; 9, Dr. A. C. Fawcett, Gold Filling; 10, Dr. W. N. Murray, Cast Gold Inlay; 11, Dr. P. S. Richardson, Cast Gold Inlay; 12, Dr. C. E. Woodbury, Cast Gold Inlay.

2 P. M.—Essay: "Gold Inlays," Dr. C. E. Woodbury, Council Bluffs, Iowa; Essay: "Certain Phases of Our Professional Duty," Dr. C. N. Johnson, Chicago, Ill.

All the gold operations, with the exception of those made by Dr. Moyer, will be made in proximal or proximo-occlusal surfaces.

On Thursday Dr. Finn, of Cedar Rapids, Iowa, will demonstrate cavity preparation, instrumentation, packing of gold, etc., using large wooden teeth with cavities, clay, etc. This special demonstration will also be given on Friday.

Dr. W. H. Taggart, of Chicago, will assist Dr. W. N. Murray upon both days of the clinic.

A number of the manufacturers have written for space in which to display those things which are new.

Dr. J. B. Ridout, of St. Paul, will demonstrate upon both days of the clinic.

Everybody interested in the advance and progress of the dental profession is invited to meet with and take part in our meeting.

For further information apply to

R. B. Wilson, Secretary,

Am. Nat. Bk. Bldg., St. Paul, Minn.

New Jersey State Board of Registration and Examination in Dentistry.

The New Jersey State Board of Registration and Examination in Dentistry will hold their semi-annual meeting to examine candidates, beginning Monday, July 6th, and continue through the 7th and 8th, in the Assembly Chamber of the State House at Trenton, N. J. Professional credentials, preliminary qualifications and a photograph must accompany the application or it will not be accepted. Sessions begin promptly at 8 a. m. each day. For full particulars address the secretary, Charles A. Meeker, D.D.S., 29 Fulton street, Newark, N. J.

Southwestern Michigan Dental Society.

The Southwestern Michigan Dental Society will hold its annual meeting at Jackson, Mich., April 14th and 15th.

Odontotechnique Society of New Jersey.

The regular monthly meeting of the Odontotechnique Society of New Jersey will be held Thursday evening, February 6, 1908, at the Elks' Club, 37 Greene St., Newark. Dr. Ralph Waldron of Newark will read a paper entitled "Contracted Arches; their Causes, Treatment and Results."

At the March meeting, Thursday evening, March 5, a paper of extraordinary interest will be read by Dr. D. A. Webb of Scranton on the subject of "Malignant Growths of the Jaw; Fractures, Etc." Stereopticon slides will be used to illustrate his essay.

JOHN A. VOORHEES,
Journal Correspondent.

St. Louis Society of Dental Science.

The St. Louis Society of Dental Science, at the December meeting elected the following officers: President, Dr. George A. Bowman; vice-president, Dr. Herman F. Cassel; secretary, Dr. Clarence O. Simpson; treasurer, Dr. W. E. Brown; executive committee, Dr. Richard Summa, Dr. E. P. Dameron, Dr. C. S. Dunham.

Advisory Council: Dr. D. O. M. Le Cron, Dr. A. H. Fuller, Dr. Adam Flickinger, Dr. Burton Lee Thorpe, Dr. W. L. Whipple, Dr. Edward H. Angle, Dr. E. E. Haverstick.

CLARENCE O. SIMPSON,

457 Century Building, St. Louis, Mo. Secretary.

Bayonne Dental Society.

The regular monthly meeting of the Bayonne Dental Society was held Thursday evening, December 5, Two new names were added to the membership roll, and the following officers were elected for 1908.

President, W. H. Mitchell, D.D.S.; vice-president, T. H. Reynolds, D.D.S.; secretary, W. P. Desmond, D.D.S.; executive committee, V. E. Mitchell, D.D.S., J. S. Ware, D.D.S., A. C. Smith, D.D.S.

W. P. DESMOND, Secretary.